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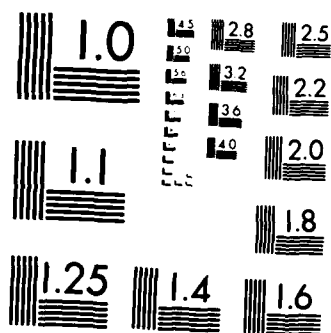
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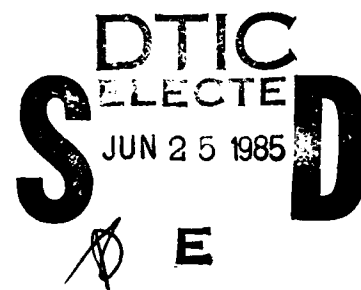
FRANK J. SEILER RESEARCH LABORATORY

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A REPORT ON MILITARY STUDENT ATTITUDES
TOWARDS INSTRUCTIONAL TELEVISION

JOHN A. STIBRAVY



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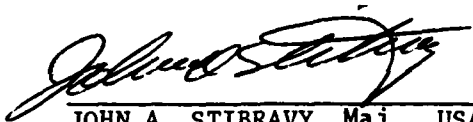
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<p>As already indicated, the use of ITV within military educational systems involves a considerable amount of funds. Yearly costs for the operation, maintenance, and purchase of equipment easily exceeds \$200,000 per year at the Academy. When one adds figures for other military units, it is clear that the military is spending considerable funds on classroom technology without having research data regarding the attitudes of the students. As already noted, this may result in negative effects. This research will provide data useful to administrators and teachers when making decisions regarding the application of ITV to the classroom environment.</p> <p>The primary research objective is to identify military student attitudes towards ITV use at several military schools, so that military educators will have the appropriate information available when deciding how to apply TV in the education program of their institution. This study provides comprehensive information regarding many aspects of TV instruction, as evaluated by military students.</p>				
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A REPORT ON MILITARY STUDENT ATTITUDES TOWARDS
INSTRUCTIONAL TELEVISION

by

THE FRANK J. SEILER RESEARCH LABORATORY
Colorado Springs, Colorado

1 April 1984

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PREFACE

This research could not have been completed without the assistance of several people. The commander, Frank J. Seiler Research Laboratory, Colorado Springs, deserves the highest praise for believing that education is the building block for a strong military force, and that research provides the key to understanding the nature of the military educational effort.

Mr. Jim Rodgers of the USAF Academy television section provided significant insight into the overall problem of researching the nature of student attitudes towards televised instruction. His suggestion that this be only the first of three major research efforts is well taken and should be implemented.

TSgt Bob Lovic, USAF Academy TV section performed the field research at Air University, and deserves the recognition earned for his work in an exacting environment under severe time constraints.

Lt. Colonel William Wallisch, a true educator, had the insight to recognize the importance of this research and suggest that it be undertaken.

Each of the commanders who allowed their people to participate in the project deserves the appreciation of every student who will enter their school in the future, for only through research can our educational system be improved.

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CHAPTER 1

INTRODUCTION

INTRODUCTION

This chapter contains general background information about the use of television in higher education and at military schools involved in this project, resulting in identification of the problem. The chapter also introduces a review of the key literature, and provides justification for research.

BACKGROUND OF THE PROBLEM

The use of instructional television (ITV) in the classrooms of our colleges and universities was so commonplace that the use of television and its effectiveness were rarely questioned. This acceptance of television, especially by administrators, may well have been so automatic that educators forgot the early research studies which indicated that while ITV could be a highly effective teaching aid, it also had its limitations. In the rush by administrators to insert technology into the classroom, military teachers have not been trained in the philosophical framework about application of ITV in the classroom.

It was clear very early in the application of ITV in the classroom that the potential for ITV as an effective instructional tool was significant. Because of the combined visual and aural impact of the new technology, educators believed that ITV could increase the amount of learning by the students, and improve school administration, especially by reducing the number of instructors required hiring more teachers. It was also thought that the new technology would be positively received by the students. Student acceptance was expected to increase as more and more students who had effectively been raised with television entered the school system.

The nature of the potential was recognized early in the development of television in the classroom worldwide.

One of the striking reactions to television has been the immediate recognition of its educational possibilities....The history of educational television has been far more a process of determining its peculiar fields of educational value than a struggle, as with film and sound-radio, for its educational recognition.¹

Research by Cassirer, Skornia, and Kaplan indicated the early favorable application of ITV in education.

Since education is basically the transmission of the accumulated knowledge and wisdom of the human race to successive generations, every means of communication must be considered. Television is one such tool, our newest mass mode of communication. It seems reasonable to state that there is no educational resource which has ever been so widely adopted in so short a time at all levels of our educational system.²

¹ R. Bull, "Television in Australia," in George Z. F. Bereday and Joseph A. Lauwerys, eds., Communication Media and the School (Tarrytown-on Hudson, NY: World Book Co., 1960), p. 325.

² Henry R. Cassirer, Television Teaching Today (Paris: UNESCO, 1960), p. 63.

Skornia regarded the advent of television in the classroom almost as the road to an educational Utopia.

Radio and television will enable education to meet the new needs and the new challenges of our age, and to meet some of the problems of the unbelievably increased mobility of population and increased costs of space. Radio and television will help the teaching profession to achieve that level excellence, remuneration, respect, professionalism, and recognition which it deserves--but which can be won only by courageous uses of these media....³

Between 1960 and 1980, the optimism of television advocates remained undiminished, as illustrated by Kaplan's 1980 remarks.

The potential uses of television as a learning resource have only begun to be realized. When integrated with various subject areas, video enables students to express themselves; to investigate other students' feelings, the elements of communication and the uses and misuses of technology; to discover ways of effecting positive change; and to use television as a humanizing force and art form.⁴

An opposing viewpoint was expressed by seldom-cited researchers regarding the use of television in education. These misgivings were based not upon the proven effectiveness of ITV, but upon the fancy educators seemed to have with applying new technology to solve non-technological problems. There was ample opinion expressed in higher education literature that the primary people to favor implementation of technology were not the classroom teachers but the administrators. The result may have been constant changing of teaching aids with no increase in student skills.

³
H.J. Skornia, "The Impact of Radio and Television on Education in the USA," in Bereday, p. 166.

⁴
Don Kaplan, Video in the Classroom (White Plains, NY: Knowledge Industry, 1980), p. 3.

Murphy and Gross expressed this doubt in their study, Learning by Television. Their study indicated that while new innovations were hailed by administrators as the salvation of education, in retrospect the quality educational development of an individual may not have been related to the technology available in the classroom.

Education is slow to accept innovation. It is a widely accepted fact that, on the average, an educational innovation takes fifty years to trickle down to the mass of schools and colleges. Earlier technological tools of communication, with obvious implications for learning, have not to this day become an intrinsic part of education. Films, radio, recordings play little more than token roles in instruction. Acclaimed in their day as TV is today, these devices have for the most part never been used with any real imagination. The fate of these earlier innovations seemed portentous for TV.⁵

This doubtful view of the role of television in education has been justified. A recent article by Fred Hechinger noted that the use of television in American education recently suffered two major setbacks. The first was the announcement by The University of Mid-America that it was deleting plans for a nationwide American Open University based upon a television network. The reasons were complex, but were based in part upon the fact that the program was supervised primarily by television people, rather than full-time academic faculty. The second setback was the end of "Sunrise Semester" sponsored by New York University and CBS. Last year, only 42 of 200 affiliated TV stations carried the program and only 47 students enrolled for credit out of a possible audience numbered in the thousands. Two of the reasons for the demise of "Sunrise Semester" were closely related to the problems of

⁵ Judith Murphy and Donald Gross, Learning by Television (New York: Fund for the Advancement of Education, 1966), p. 11.

effective use of television in higher education, as follows: a minimal investment in production resulted in dull programming, and funding reductions resulted in a lack of inspired instruction.⁶

As was noted in "The Misfortune of College Courses, or Why 'Big Bird' Can't Teach Thermodynamics," the outlook for college TV courses "appears to be bleak."⁷ There is no significant difference in results with respect to broadcast method. The only differences between closed circuit ITV and broadcast TV are the size of the audience and the age of the audience. Normally, the broadcast audience is larger than the CCTV total audience, and the broadcast audience is normally older than the on-campus CCTV audience. Research, however, shows that there is no difference in effectiveness between the two types of transmission methods, and thus the lessons learned from broadcast methods may be reasonably applied to the CCTV method. "Publications such as the Adult and Continuing Education Today Newsletter openly speculate that TV education is a lost cause."⁸ The causes identified by the "Big Bird" article included the facts that true (faculty) academic interest in TV use is minimal, research which produced negative results for TV has been ignored and print on a screen, such as with computer instruction, is more effective than pictures. Studies show that when watching TV, the audience enters a state resembling light sleep after just 20 minutes of viewing.⁹ The student's attention is lost before the battle for his mind has started.

⁶ Fred M. Hechinger, "Will Televised Instruction See Better Days?" The New York Times, September, 1982.

⁷ "The Misfortune of College Courses on Television, or Why 'Big Bird' Can't Teach Thermodynamics", Chronicle of Higher Education, November 17, 1982.

⁸ Ibid.

⁹ Ibid.

METHODOLOGY

Sample Sizes

The sample sizes used in the prestudy were the result of an effort to include the largest sample possible. The sample size was limited by scheduling conflicts and the availability of funds. The ROTC samples approached 90% of the unit population, while the remaining samples were approximately 5% of their total populations. The total sample size of the prestudy was 967 military students.

Data Collection

Students involved in the pretest completed a survey form about the use of ITV based upon a literature review and interviews with faculty members. The original survey was composed of 120 questions which took 60 minutes to complete. Each group was monitored during the testing to prevent students from influencing each other's responses to the survey. For this report, duplicate questions and psychological profile questions have been deleted.

Data Analysis

The responses were machine scored at the USAF Academy. The computer product consisted of the number of students responding to each choice and the percentage distribution for each response option.

Table 1 lists the units involved in this study, and the academic level of those units.

TABLE 1
EDUCATIONAL LEVEL OF MILITARY SCHOOLS INVOLVED

School	Location	Academic Level	Sample
ROTC	Colorado Springs	Undergraduate 4 yr.	28
	Pueblo, CO.	Undergraduate 4 yr.	44
	Ft. Collins, CO.	Undergraduate 4 yr.	29
Air Training Command	Denver, CO.	Technical College	472
Squadron Officers School	Montgomery, Al.	Professional School	96
Air Force Institute of Technology	Dayton, OH.	Graduate School	54
Academic Instructor School	Montgomery, AL.	Professional School	94

In essence, while administrators regard ITV as essential and positive, classroom teachers and students do not. But almost no one in the military school system recognizes this fact or has researched the problem. Instead, increased use of ITV is planned without consulting the students. The effects of this type of decision-making may involve negative consequences for the institution.

JUSTIFICATION FOR RESEARCH

As already indicated, the use of ITV within military educational systems involves a considerable amount of funds. Yearly costs for the operation, maintenance, and purchase of equipment easily exceeds \$200,000 per year at the Academy. When one adds figures for other military units, it is clear that the military is spending considerable funds on classroom technology without having research data regarding the attitudes of the students. As already noted, this may result in negative effects. This research will provide data useful to administrators and teachers when making decisions regarding the application of ITV to the classroom environment.

RESEARCH OBJECTIVE

The primary research objective is to identify military student attitudes towards ITV use at several military schools, so that military educators will have the appropriate information available when deciding how to apply TV in the education program of their institution. This study provides comprehensive information regarding many aspects of TV instruction, as evaluated by military students.

Already we begin to identify the conflict between planning for the effective use of ITV in the classroom and simply using TV because it appears to be the thing to do. On one hand we have the advocates of TV use whose position is best expressed by noted television commentator Eric Servaried.

Every new development of communications in the direction of the mass of people has been opposed by intellectuals of a certain stripe. I am sure that Gutenberg was denounced by the elite of his time; his device would spread dangerous ideas among the God-fearing obedient masses. The typewriter was denounced by intellectuals of the more elfin variety; its clacking would drive away the muses who apparently were accustomed to the scratching of the quill pen. The first motion pictures were denounced; they would destroy legitimate theater. Then the sound picture was denounced; it would destroy the true art of the film which was pantomime.

To such critics, of course, television is destroying everything. It is destroying conversation, they tell us. Nonsense. Nonconversing families were always that way. It has, in fact, stimulated billions of conversations that otherwise would not have occurred.

It is destroying the habit of reading, they say. This is nonsense. Book sales in this country during the lifetime of general television have greatly increased and well beyond the increase in population.

TV is debasing the use of the English language, they tell us. Nonsense. Until radio and then TV, tens of millions of people living in sharecropper cabins, in small villiages on the plains and in the mountains, in the great city slums had never heard good English diction in their lives. If anything, this medium has improved the general level of diction.

You, as teachers, should say nonsense to these criticisms, too; and use television to stimulate good conversation, more reading, better diction. Consider it a basic instruction material.²³

²⁴Eric Sevaried, "TV Destroys Reading? 'Nonsense!'" Instructor, March 1978, in Kaplan, p. 1.

In spite of an available scientific approach to media implementation, we should remember that part of the success of television in the classroom is based upon the preconceived notion that television is fun, and this fun can be transferred to the classroom.

Many of today's students were raised on such shows as "Sesame Street." As Chester Price notes,

"Sesame Street" is a case in point whereby its success was based on the fact that learning is (and can be) fun. Hence, a medium which thus far has been unabashedly directed toward entertaining can be looked to for helping us to understand more of learning and teaching and therefore more about thinking.²³

One would think, therefore, that the entertainment charisma of TV would carry over to the classroom. The logical conclusion is that students would be in favor of TV because it is associated with the painless occupation of entertainment. As we shall soon discover, this was not the case with recent research done with military students. Yet, when we think of TV in the classroom, our first thought is that the students will like it because it is associated with "fun" rather than work. Research has proved this to be an incorrect thought.

Educators, especially administrators, are often unaware of the fact that students believe that the "best" education can not be provided by a television, and that unless the teacher is a very poor instructor, the students much prefer seminars, one-to-one instruction, and even lectures to instruction given all by TV. Implementing a classroom methodology without knowing the students' attitudes towards that methodology may result in poor enrollment in elective courses and a poor retention rate for the institution.

²³Chester M. Price, ed., Television and Education (Beverly Hills, CA.: Sage Publications, 1978), p. 8.

(5) How can the most appropriate experts find time to do ITV, since ITV requires more preparation time than does classroom teaching.

(6) WHO IS IN CHARGE--EDUCATORS OR BROADCASTERS?²¹

Tarbet also cautioned administrators that there were additional policy decisions which needed to be considered regarding the use of television, including the length and frequency of broadcasts, distribution of teaching load if the teacher is preparing for a TV class, and which courses are to be offered by TV.²² If administrators fail to plan, in spite of their enthusiasm, the results may be a number of courses being taped with no logical plan of curriculum development being followed. This reflects the problem of educators who use TV but have no background in technology versus technicians who set goals but have no background in education theory.

²¹

Guthrie Moir, Teaching and Television (Headington Hill Hall, Oxford: Pergamon Press, 1967), pp. 96-97.

²²Donald G.

Tarbet, Television and Our Schools (New York: Ronald Press, 1961), pp. 125-143.

Perhaps the key ingredient in the use of ITV in the classroom is planning--what will be done, how it will be done, who will do it, and why it is being done. The lack of planning may result in dissatisfied students and in unclear course goals. Fortunately, there are plenty of guidelines available to follow in planning the use of ITV.

Guthrie Moir suggests that these questions be answered before ITV is used in the classroom:

a. Program Planning

- (1) Is the best use being made of limited transmission time?
- (2) Are the right programs being produced for the right audience?
- (3) Ought someone (academic) to have more influence over program production while someone else (TV production) has less?
- (4) How can television serve the audience which is unsure of what its education needs are?
- (5) What should the relationship be between ITV and other methods of classroom education, especially with respect to time allotted to each?

b. Production

- (1) Who should present series--actors or subject specialists? While actors may do better in front of the camera than a teacher, there is also said to be no replacement for the real conviction of an expert. How does this vary by subject?
- (2) Who will do the writing for a production? TV writers or the subject expert?
- (3) How can directors learn to judge what visual styles serve specific educational objectives?
- (4) How can academics learn to see themselves as part of a production whole?

effectively). This conflict was related to the development of student ability to discriminate in the cultivation of attitudes and the choice of values,²⁰ versus merely learning facts. Values courses tended to be presented to juniors and seniors, and were the primary weakness of ITV application.

Educators have functioned in a situation involving four participants: the student, the teacher, the administrator, and the TV production crews. The fact that these worlds operated with different goals and different methods made a unified conceptualization of TV use in a given institution almost impossible and resulted in massive TV production costs with no significant increase in student learning, lecture quality, increased enrollment in TV courses, or more efficient use of teacher time.

This study examined the specific situation involved in the application of television in an educational setting with the primary emphasis upon the USAF Academy and subordinate emphasis upon other military schools.

²⁰ Per G. Stensland, "The Classroom and the Newspaper," in Henry, p. 217.

Supplemental instruction shifted the burden of the course material to the teacher, almost in direct comparison to major resource teaching. As the name implied, the teacher instructed the bulk of the course material, but used TV to add additional experiences that the teacher could not provide. Schools with live "feed" capability may have used television to supplement the lecture. For example, a course in political science may have used television to watch the political processes of a national nominating convention as a course supplement. A history course may have viewed Winds of War as a supplement to classwork.

Observational teaching was best applied in medical school courses such as dentistry and biology. This type of television use allowed large classes, or remote classes, to view the details of a dental operation, dissection, or microscope slide.

Overall, the literature indicated that the most frequent application of television and the area in which the most research was available was simply the transference of facts from the television show to the student, as measured by a teacher-designed test. This type of teaching tends to fall in Campion's and Lanagan's grouping of total and major teaching with television. As we shall see, this type of TV use has proved its equivalency with the live instructor for certain course types to the point where equivalency is no longer questioned.

But there arose a conflict between the need to transmit facts and the need to have students develop their own paradigms (based upon the students developing the skills needed to communicate

demonstrations or creating a continuous tape of instructional resources which can be shown at strategic times during class.¹⁸

Lee Campion and Yvonne Lanagan found that television was primarily used in four ways which included total television teaching, major resource teaching, supplementary television teaching, and observational teaching.¹⁹ In total television teaching, the only assistance received from the university in the student's educational program was the television tape. The rest of the learning experience was the responsibility of the student. The best example of this type of program was the adult education course. The student may or may not have had a syllabus, and may have been required to purchase additional texts. This type of course of study required the student to be highly motivated or else the amount of learning could be very low. The tendency on the part of the unmotivated student was to not pay close attention to the programs. One cure for this problem was frequent testing, but as we shall examine later, this threat may be counter-productive.

The major resource teaching system was one in which television took over the burden of the formal course presentations, but the learning process was facilitated by the addition of small discussion groups, laboratory experiments, and individual diagnosis and remedial measures. This type of application would have been most useful with a large class. The class might have viewed a formal lecture on TV, then have met as small discussion groups to increase learning.

¹⁸ J.W. Brown and J.W. Thornton Jr., College Teaching: A Systematic Approach (2nd ed) (New York: McGraw-Hill, 1971), p.

¹⁹ Lee E. Campion and Yvonne Lanagan, And TV Too! (Washington, D.C.: National Education Association, 1961), pp. 16-17.

circuit system or live hook-up", and as "educational shows broadcast to the schools via the Public Broadcast System. The later type ranged from shows such as "Sesame Street" to offerings by the Chicago City Junior College.¹⁶

According to A. J. Fogcross and Irene F. Cypher, based upon consultations with educators involved in television applications, television was useful in providing motivation and stimulation to students, developing attitudes, developing intellectual skills, demonstrating processes, and challenging pupils to assume more responsibility for their own learning.¹⁷ But their response must be qualified in the light of application by objective. TV could only do all of these things if it was applied in the proper situation.

Brown and Thornton identified additional situations in which TV may be useful in the classroom, including as a substitute for live faculty lectures on campus, as an enlarger of slides, documents, pictures, or even faculty meetings in large lecture rooms; as a way to offer instruction off campus, to geographically distant locations, and to other colleges; as a means of permitting the repeated and convenient observation of an event; as a means of encouraging faculty and students to observe their own behavior, e.g., teaching; as a means of sharing with many other people experiences such as childbirth or field behavior which otherwise would not be possible; as a way of videotaping short

¹⁶ Television, the Book, and the Classroom (Washington, D.C.: The Library of Congress, 26 April 1978), pp. 14-15.

¹⁷ A. J. Fogcross and Irene Cypher, Audio Visual Education (New York: Thomas Crowell Co., 1961) p. 16.

The role of the trained teacher in the effective application of ITV can not be stated too often. The well-known Denver-Stanford project found that "a well-trained and highly motivated teacher is the most effective single learning aid that a school can combine with instructional television."¹⁵

Yet, this obvious variable was rarely considered when decisions were being made regarding the implementation of TV in a school. In addition, teachers recognized the need to transmit not only facts, but the source of the facts and, therefore, the validity of a given source. TV might be able to transmit the facts, but the follow-up critical evaluation procedures could neither be inspired nor taught well by TV. The highest goal of education, the development of student paradigms, often rested upon the influence and motivation of the classroom teacher and not upon technology.

An indication of the problems facing ITV was the fact that ITV was only effective in one philosophical area: the problem oriented survey course. This limited ITV use from a philosophical viewpoint at the same time that ITV use was increasing. The result was that apparently ITV was being applied in cases for which it was not well suited.

Application of TV to the classroom by first defining the objective was further specified in a Library of Congress report (1978) which divided the use of television into two broad areas. These areas were "as an instructional tool in the classroom, either through the closed

¹⁵ John L. Mayman, Jr., "The Denver-Stanford Project: Increasing ITV's Effectiveness Through Contextual Activities," in Barton L. Griffith and Donald W. MacLennan, eds., Teaching by Television (Columbia, MO.: University of Missouri, 1964), pp. 34-38.

It was, then, as if a technological marvel which was supposed to solve the many problems of the classroom environment was suddenly discovered. Without researching the students' attitudes and the effects these attitudes might have, over the protestations of numerous faculty members, ITV appeared not just in a few classrooms, but in almost every classroom in a very brief amount of time. As Paula noted, "The rush to adapt television was clear. The usual time required for 3% of the school systems to adopt new practices was 15 years. TV made the grade in only five years."¹³

The trained teacher recognized that certain goals drove the use of television in the classroom. These goals needed to be considered when instructors planned to use television as part of their presentation and negative responses towards ITV in the classroom by students were indications that these principles were not being considered. The first and primary principle involving ITV was the need to transmit facts. In higher education this need was primarily served at the freshman and sophomore level of courses, as stated by Chickering.¹⁴ The teacher, therefore, needed to examine first the course goals. Were the goals merely to transmit facts? Or, were the goals, as frequently occurred at the senior undergraduate level or graduate level, more aligned towards development of the student's ability to think? The difference was vital in relation to which teaching methodology the classroom instructor would choose to use.

¹³ Fred John Pula, Application and Operation of Audiovisual Equipment in Education (New York: John Wiley & Sons, 1968), p. 239.

¹⁴ "Arthur Chickering on Stages of Human Development," in Handbook on Undergraduate Curriculum (San Francisco: Jossey-Bass, 1978), pp. 300-301.

The conclusion was that TV was generally not in the hands of academics with training in curriculum development, but in the hands of TV people. The result has been "making the wrong kinds of courses for the wrong reasons."¹⁰

Why was it that ITV not only entered the classroom, but proliferated? In addition to the favorable attitude towards ITV by administrators, other groups favored TV and had the influence to make this favor have a direct effect upon the classroom environment. These groups were the government and private research foundations. The influx of funds in the 1950s virtually caused the application of ITV to the classroom, for without the grants for research which were based upon the installation of TV sets in the classroom, TV might have remained for many years merely a form of entertainment. The National Defense Education Act of 1958, Titles III and IV, provided the aid for development of the new media. Especially essential was Title VI which authorized federal aid for research into the use of the new media in education. In 1958-1959, 353 proposals for research were submitted to the New Educational Media branch of the Division of Statistics and Research, Office of Education.¹¹ In conjunction with the government grants were grants from the Ford Foundation totaling millions of dollars.¹²

¹⁰Ibid.

¹¹Hilde T. Himmelweit, "Television, Education, and Research," in Bereday, p. 273.

¹²Murphy, p. 11.

The Value of the Data

The following data are valuable to educators in military higher education institutions for several reasons.

First, very little is known about the attitudes of military students. Negative attitudes on the part of military students towards the classroom methodology may result in significant negative results for the institution. This study attempts to provide some basic data where there is currently none.

Second, this study provides a very comprehensive review of student attitudes towards various aspects of ITV use. This is one of the most complete reviews available, involving almost 1,000 students at seven military schools. The students ranged from the equivalent of a junior technical college through graduate school.

Third, this report is but the first of three required studies. Since the study of instructional television involves the students, faculty, and TV production personnel, additional research must be conducted at all units involved with regards to determining the faculty attitudes towards ITV and the quality of the productions as determined by production personnel. However, since the existence of an institution depends primarily upon that institution's ability to attract students, it was believed that the most benefit could be gained from studying the students first. Based upon the students' responses, the teaching methodology at military schools may be revised to improve student satisfaction.

CHAPTER 2

AIR TRAINING COMMAND

LOWRY AFB RESULTS

This chapter provides the questions, response options, and response distributions for Lowry AFB, Denver, Colorado. The sample consisted of military students of Air Training Command attending technical schools.

The responses in this chapter are significant since the students surveyed were the least educated of the total sample. Research suggests that the most favorable audience for ITV are those students who are the least educated. The higher the education level, the more resistive the students towards ITV use.

Therefore, if TV is going to be applied in the classroom, the best audience is the students within Air Training Command. However, it is also important to notice how important the classroom NCO instructor was to the students sampled. It was clear that the students do not want their instructor to be replaced by a TV set, even though TV performs best when only transferring facts, rather than values. Yet, the responses indicate that TV may have some role in the classroom.

TABLE 2
LOWRY AFB
TV ATTITUDE DATA SUMMARY

Quest. No.	Question and Response Options	N	%
1	Not Applicable		
2	<u>What is your favorite type of class?</u>		
	Lecture	67	14.1
	Media	91	19.2
	Seminar	72	15.6
	Combination to include "Media"	192	40.6
	Combination without "Media"	37	7.8
3	<u>TV as an instructional tool is best suited for:</u>		
	Grade school	101	21.4
	Junior/High school	38	8.0
	College/Tech school	181	38.3
	Adult education programs	125	26.4
4	<u>A TV course is best suited for which sized audience?</u>		
	Small (less than 30)	192	40.6
	Medium (30-100)	43	9.1
	Large (100+)	51	10.8
	Never suited for classroom use	167	35.3
5	<u>If I knew that it would make no difference in my grade, I'd take a course taught via:</u>		
	TV	96	20.3
	Direct	84	17.7
	Mix	232	49.1

-continued-

TABLE 2 -- Continued

Quest. No.	Question and Response Options	N	%
6	<u>I'd receive a better grade from a course that was:</u>		
	TV	25	5.2
	Direct	208	44.0
	Mix	232	49.1
7	<u>I'd learn more from a course that was:</u>		
	TV	26	5.5
	Direct	208	44.0
	Mix	232	49.1
8	<u>I'd rather watch TV instruction via:</u>		
	Color	424	89.8
	Black and White	21	4.4
9	<u>The quality of videotapes I view is:</u>		
	Good	130	27.5
	Poor	66	13.9
	Average	146	51.6
10	<u>TV is best suited for:</u>		
	Demonstration	234	49.5
	Lecture	60	12.7
	No difference	146	30.9
11	<u>If TV were used in my classroom, I'd prefer it to be used:</u>		
	The entire period	44	9.3
	1/2 the period	266	56.3
	10 minutes per period	74	15.6
	Not at all	63	13.3
12	<u>I like TV in the classroom best when used:</u>		
	Daily	121	25.6
	Three time a week	185	39.1
	Once a week	133	28.1

-continued-

TABLE 2 -- Continued

Quest. No.	Question and Response Option	N	%
13	<u>Students indicated that they would enroll in these courses taught all by TV:</u>		
	History of Flight	74	15.6
	Battlefield Tactics	55	11.6
	Sociology	65	13.7
	Driver Safety	53	11.2
	Drug Abuse	54	11.4
	Math	88	18.6
	English	87	18.4
	Biology	53	11.2
	History	208	44.0
	Psychology	53	11.2
	Vehicle Maintenance	110	23.3
	Military Courtesy	126	26.6
	Basic Military Information	137	29.0
	Effective Writing	52	11.0
	Theater	77	16.3
	Foreign Language	52	11.0
	Flying	64	13.5
	Geography	126	26.6
	Nuclear Research	48	10.1
	Literature	61	12.9
14	<u>I believe that TV is most useful in:</u>		
	Military training	69	14.6
	College courses	80	16.9
	Adult education	118	25.0
	High school	54	11.4
	Grade school	128	27.1
15	<u>In which is TV more useful:</u>		
	Tech school	233	49.3
	High school	204	43.2

-continued-

TABLE 2 -- Continued

Quest. No.	Question and Response Option	N	%
	Basic training	205	43.4
	Tech school	204	43.2
	College	159	33.6
	Adult education	273	57.8
	High school	241	51.0
	College	196	41.5
16	<u>I want more technology in my life:</u>		
	Agree	357	75.6
	Disagree	107	22.6
17	<u>I would learn more from a TV course if I had a studio tour before the class began:</u>		
	Agree	177	37.5
	Disagree	271	57.4
18	<u>Would you be inspired to do more research if the teaching you received was:</u>		
	Direct	336	71.1
	TV	132	27.9
19	<u>The quality of instruction I receive now is better via:</u>		
	Direct	385	81.5
	TV	73	15.4

-continued-

TABLE 2 -- Continued

Quest. No.	Question and Response Option	N	%
20	<u>Why do you feel that Direct instruction is better than TV instruction?</u>		
	I get to ask questions	217	45.9
	I'm more inspired	21	4.4
	TV is too incomplete	7	1.4
21	<u>If you could hear a live lecture, no demonstrations, audience of 100 in a satisfactory, modern room, or watch the same lecture at the same time on TV in a similar room, which would you choose?</u>		
	TV	154	32.6
	Live	310	65.6
22	<u>Why did you answer "TV" in question 21?</u>		
	More peaceful than the live lecture..	94	19.9
	Less crowded	31	6.5
	TV is just as efficient as live	100	21.1
	My friends went to the TV room	7	1.4
	I can do something else while the TV operates	10	2.1
23	<u>If a proctor were in the TV room, I'd:</u>		
	Go watch the live lecture	46	9.7
	Stay in the TV room	20	4.2
24	<u>I'd listen to the live lecture because:</u>		
	It makes me feel human	52	11.0
	My friends would be there	14	2.9
	I get more from Direct than from TV..	241	51.0
	Less crowded	6	1.2
	In a crowd I can sleep	3	.6
25	<u>Direct teaching is generally:</u>		
	Entertaining	296	62.7
	Dull	164	34.7
	Communicative	403	85.3
	Hard to follow	63	13.3

-continued-

TABLE 2 -- Continued

Quest. No.	Question and Response Option	N	%
	Friendly	395	83.6
	Remote	70	14.8
	Fun	315	66.7
	Boring	142	30.0
26	<u>In a direct class, how many times do you ask questions?</u>		
	At least once a class	326	69.0
	Once every other class	71	15.0
	Once every third class	19	4.0
	Less	52	11.0
27	<u>I'd learn more from:</u>		
	Blackboard TV lecture	80	16.9
	Blackboard direct lecture	280	59.3
	Direct lecture	72	15.2
	TV lecture	32	6.7
28	<u>Would you like to have part of your education by TV?</u>		
	Yes	313	66.3
	No	148	31.3
29	<u>If you answered "Yes" to question 28, what part of your overall education program would you like to see given via TV?</u>		
	Less than 10%	37	7.8
	10-40%	201	42.5
	40-60%	91	19.2
	60-80%	25	5.2
	80-100%	15	3.1

-continued-

TABLE 2 -- Continued

Quest. No.	Question and Response Option	N	%
30	<u>Select each item you feel is a drawback to TV tapes:</u>		
	Dull	71	15.0
	Too fast	66	13.9
	Jargon	26	5.5
	Biased	41	8.6
	Religious attitude forced on audience.	16	3.3
	Manipulative	50	10.5
	Vague	120	25.4
	Confusing	26	5.5
	None of above	174	36.8
31	<u>Would you be interested in a course taught all by TV?</u>		
	Yes	127	26.9
	No	334	70.7
32	<u>I feel that TV effectiveness is reduced by the number of feet you are from the TV screen:</u>		
	Yes	177	37.5
	No	271	57.4
33	<u>If I could ask questions after a TV tape were shown, or I could leave, I'd:</u>		
	Leave	22	4.6
	Sit and listen to others' questions..	171	36.2
	Ask a question	236	50.0
34	<u>TV instruction is:</u>		
	Dull	259	54.8
	Lively	194	41.1
	Efficient	298	63.1
	Wasteful	155	32.8
	Fun	202	42.7
	Boring	240	50.8

-continued-

TABLE 2 -- Continued

Quest. No.	Question and Response Option	N	%
35	<u>Would you enjoy TV classes more if you knew that the teaching method had no grade impact?</u>		
	Yes	234	49.5
	No	221	46.8
36	<u>I'd rather not be exposed to any educational TV in my school environment:</u>		
	Agree	95	20.1
	Disagree	367	77.7
37	<u>I'd like to have CCTV available in my dormitory:</u>		
	Agree	336	71.1
	Disagree	122	25.8
38	<u>I'd like more tapes available at the nearest library:</u>		
	Agree	345	73.0
	Disagree	122	25.8
39	<u>When I eat in a military mess, I'd like to watch military films via TV:</u>		
	Agree	132	27.9
	Disagree	322	68.2
40	<u>I'd like access to all-night news shows via TV:</u>		
	Agree	308	65.2
	Disagree	147	31.1
41	<u>More basic training lectures should be given via TV:</u>		
	Agree	182	38.5
	Disagree	273	57.8

-continued-

TABLE 2 -- Continued

Quest. No.	Question and Response Option	N	%
42	<u>More of my tech school courses could be taught via TV:</u>		
	Agree	198	41.9
	Disagree	240	50.8
43	<u>More ROTC lectures could be on TV tape:</u>		
	Agree	144	30.5
	Disagree	183	38.7
44	<u>I like TV in the classroom:</u>		
	Agree	263	55.7
	Disagree	176	37.2
45	<u>I want more TV in the classroom:</u>		
	Agree	215	45.5
	Disagree	223	47.2
46	<u>Teachers' skill being equal, in which type of class do you learn more?</u>		
	Lecture	143	30.2
	Media	157	33.2
	Seminar	159	33.6
47	<u>If the teacher were unskilled, in which type of class would you learn the most?</u>		
	Lecture	75	15.8
	Media	272	57.6
	Seminar	120	25.4
48	<u>If the teacher were outstanding, in which type of class would you learn the most?</u>		
	Lecture	280	59.3
	Media	69	14.6
	Seminar	114	24.1

-continued-

TABLE 2 -- Continued

Quest. No.	Question and Response Option	N	%
49	<u>How do you rate your military teachers overall compared to civilian teachers?</u>		
	Far better	92	19.4
	Somewhat better	165	34.9
	The same as civilian	158	33.4
	Somewhat worse	36	7.6
	Much worse	4	.8
50	<u>If you had all your instruction via TV, would you learn as much as if you had traditional direct instruction?</u>		
	Yes	61	12.9
	No	198	41.9
	Don't know	202	42.7
51	<u>If all of your classes were presented via TV, do you feel the tapes could be good enough that you would rarely (less than once/two weeks) need to see a teacher face-to-face?</u>		
	Yes	141	29.8
	No	319	67.5
52	<u>Which is more honest, TV or a live teacher?</u>		
	No difference	199	42.1
	TV	43	9.1
	Teacher	224	47.4
53	<u>I would enjoy a course of my choice taught all by TV even if I never saw an instructor:</u>		
	Agree	195	41.3
	Disagree	273	57.8

-continued-

TABLE 2 -- Continued

Quest. No.	Question and Response Option	N	%
54	<u>I would enjoy a course of my choice taught by TV if I could see a teacher when I wanted to, but didn't have to:</u>		
	Agree	195	41.3
	Disagree	273	57.8
55	<u>I would take a course of my choice by TV if I could ask questions on the spot:</u>		
	Agree	423	89.6
	Disagree	42	8.8
56	<u>A course that a teacher needs 50 min. to teach could be done in 35 min. by TV.</u>		
	Agree	82	17.3
	Disagree	102	21.6
	Perhaps	287	60.5
57	<u>I like the fact that an instructor won't call on me in a TV class:</u>		
	Agree	161	34.1
	Disagree	283	59.9
58	<u>Educational TV will reduce the number of faculty needed:</u>		
	Agree	191	40.4
	Disagree	67	14.1
	Don't know	195	41.3
N = 472			
Average age: 18			

CHAPTER 3

AIR UNIVERSITY ACADEMIC INSTRUCTOR SCHOOL

This chapter provides the questions, response options, and response distributions for students attending the Academic Instructor School at Maxwell AFB, Montgomery, Alabama.

The responses in this chapter are significant because they represent the views of future military faculty members. Research indicates that civilian faculty members tend to express negative attitudes towards ITV. The following table indicates how a sample of future military teachers felt towards ITV when they viewed ITV from the role of student.

TABLE 4 -- Continued

Quest. No.	Question and Response Options	N	%
6	<u>I'd receive a better grade from a course that was:</u>		
	TV	6	6.2
	Direct	51	53.1
	Mix	38	39.5
7	<u>I'd learn more from a course that was:</u>		
	TV	1	1.0
	Direct	51	53.1
	Mix	44	45.8
8	<u>I'd rather watch TV instruction via:</u>		
	Color	93	96.8
	Black and White	2	2.0
9	<u>The quality of videotapes I view is:</u>		
	Good	30	31.2
	Poor	20	20.5
	Average	45	46.8
10	<u>TV is best suited for:</u>		
	Demonstration	17	17.7
	Lecture	48	50.0
	No difference	25	26.0
11	<u>If TV were used in my classroom, I'd prefer it to be used:</u>		
	The entire period	2	2.0
	1/2 the period	45	46.8
	10 minutes per period	32	33.3
	Not at all	11	11.4
12	<u>I like TV in the classroom best when used:</u>		
	Daily	21	21.8
	Three time a week	41	42.7
	Once a week	27	28.1

-continued-

TABLE 4
SQUADRON OFFICERS SCHOOL
TV ATTITUDE DATA SUMMARY

Quest. No.	Question and Response Options	N	%
1	Not Applicable		
2	<u>What is your favorite type of class?</u>		
	Lecture	12	12.5
	Media	4	4.1
	Seminar	29	30.2
	Combination to include "Media"	41	42.7
	Combination without "Media"	10	10.5
3	<u>TV as an instructional tool is best suited for:</u>		
	Grade school	20	20.8
	Junior/High school	9	9.3
	College/Tech school	31	32.2
	Adult education programs	36	37.5
4	<u>A TV course is best suited for which sized audience?</u>		
	Small (less than 30)	58	60.4
	Medium (30-100)	6	6.2
	Large (100+)	10	10.5
	Never suited for classroom use	18	18.7
5	<u>If I knew that it would make no difference in my grade, I'd take a course taught via:</u>		
	TV	13	13.4
	Direct	51	53.1
	Mix	38	39.5

-continued-

CHAPTER 4

AIR UNIVERSITY SQUADRON OFFICERS SCHOOL

This chapter presents the questions, response options, and response distributions for students attending Squadron Officers School at Maxwell AFB, Montgomery, Alabama.

The students involved in the sample all have a Bachelors degree, and some have a Masters and PhD. Research would suggest that college graduates would not express favorable attitudes towards ITV. Certainly, it would be expected that these students would not be as favorable towards ITV as would students at Lowry AFB.

TABLE 3 -- Continued

Quest. No.	Question and Response Option	N	%
54	<u>I would enjoy a course of my choice taught by TV if I could see a teacher when I wanted to, but didn't have to:</u>		
	Agree	66	70.2
	Disagree	26	27.6
55	<u>I would take a course of my choice by TV if I could ask questions on the spot:</u>		
	Agree	82	87.2
	Disagree.	8	8.5
56	<u>A course that a teacher needs 50 min. to teach could be done in 35 min. by TV.</u>		
	Agree	18	19.1
	Disagree	21	22.3
	Perhaps	51	54.2
57	<u>I like the fact that an instructor won't call on me in a TV class:</u>		
	Agree	20	21.2
	Disagree	66	70.2
58	<u>Educational TV will reduce the number of faculty needed:</u>		
	Agree	33	35.1
	Disagree	18	19.1
	Don't know	39	41.4
N = 94			
Average age: 21+			

TABLE 3 -- Continued

Quest. No.	Question and Response Option	N	%
49	<u>How do you rate your military teachers overall compared to civilian teachers?</u>		
	Far better	15	15.9
	Somewhat better	32	34.0
	The same as civilian	36	38.2
	Somewhat worse	8	8.5
	Much worse	-	-
50	<u>If you had all your instruction via TV, would you learn as much as if you had traditional direct instruction?</u>		
	Yes	2	2.1
	No	63	67.0
	Don't know	25	26.5
51	<u>If all of your classes were presented via TV, do you feel the tapes could be good enough that you would rarely (less than once/two weeks) need to see a teacher face-to-face?</u>		
	Yes	10	10.6
	No	78	82.9
52	<u>Which is more honest, TV or a live teacher?</u>		
	No difference	40	42.5
	TV	6	6.3
	Teacher	45	47.8
53	<u>I would enjoy a course of my choice taught all by TV even if I never saw an instructor:</u>		
	Agree	40	42.5
	Disagree	53	56.3

-continued-

TABLE 3 --Continued

Quest. No.	Question and Response Option	N	%
42	<u>More of my tech school courses could be taught via TV:</u>		
	Agree	41	43.6
	Disagree	45	47.8
43	<u>More ROTC lectures could be on TV tape:</u>		
	Agree	19	20.2
	Disagree	20	21.2
44	<u>I like TV in the classroom:</u>		
	Agree	58	61.7
	Disagree	29	30.8
45	<u>I want more TV in the classroom:</u>		
	Agree	27	28.7
	Disagree	58	61.7
46	<u>Teachers' skill being equal, in which type of class do you learn more?</u>		
	Lecture	24	25.5
	Media	10	10.6
	Seminar	58	61.7
47	<u>If the teacher were unskilled, in which type of class would you learn the most?</u>		
	Lecture	5	5.3
	Media	43	45.7
	Seminar	46	48.9
48	<u>If the teacher were outstanding, in which type of class would you learn the most?</u>		
	Lecture	44	46.8
	Media	6	6.3
	Seminar	25	26.5

-continued-

TABLE 3 -- Continued

Quest. No.	Question and Response Option	N	%
35	<u>Would you enjoy TV classes more if you knew that the teaching method had no grade impact?</u>		
	Yes	27	28.7
	No	43	45.7
36	<u>I'd rather not be exposed to any educational TV in my school environment:</u>		
	Agree	12	12.7
	Disagree	80	85.1
37	<u>I'd like to have CCTV available in my dormitory:</u>		
	Agree	46	48.9
	Disagree	34	36.1
38	<u>I'd like more tapes available at the nearest library:</u>		
	Agree	60	63.8
	Disagree	26	27.6
39	<u>When I eat in a military mess, I'd like to watch military films via TV:</u>		
	Agree	9	9.5
	Disagree	76	80.8
40	<u>I'd like access to all-night news shows via TV:</u>		
	Agree	67	71.2
	Disagree	22	23.4
41	<u>More basic training lectures should be given via TV:</u>		
	Agree	30	31.9
	Disagree	55	58.5

-continued-

TABLE 3 -- Continued

Quest. No.	Question and Response Option	N	%
30	<u>Select each item you feel is a drawback to TV tapes:</u>		
	Dull	18	19.1
	Too fast	17	18.0
	Jargon	2	2.1
	Biased	13	13.8
	Religious attitude forced on audience.	3	3.1
	Manipulative	6	6.3
	Vague	8	8.5
	Confusing	3	3.1
	None of above	44	46.8
31	<u>Would you be interested in a course taught all by TV?</u>		
	Yes	32	34.0
	No	59	62.7
32	<u>I feel that TV effectiveness is reduced by the number of feet you are from the TV screen:</u>		
	Yes	59	62.7
	No	29	30.8
33	<u>If I could ask questions after a TV tape were shown, or I could leave, I'd:</u>		
	Leave	10	10.6
	Sit and listen to others' questions..	17	18.0
	Ask a question	39	41.4
34	<u>TV instruction is:</u>		
	Dull	52	55.3
	Lively	25	26.5
	Efficient	60	63.8
	Wasteful	16	17.0
	Fun	22	23.4
	Boring	48	51.0

-continued-

TABLE 3 -- Continued

Quest. No.	Question and Response Option	N	%
	Friendly	91	96.8
	Remote	2	2.1
	Fun	71	75.5
	Boring	6	6.3
26	<u>In a direct class, how many times do you ask questions?</u>		
	At least once a class	75	79.7
	Once every other class	11	11.7
	Once every third class	-	-
	Less	-	-
27	<u>I'd learn more from:</u>		
	Blackboard TV lecture	6	6.3
	Blackboard direct lecture	65	69.1
	Direct lecture	17	18.0
	TV lecture	-	-
28	<u>Would you like to have part of your education by TV?</u>		
	Yes	66	70.2
	No	17	18.0
29	<u>If you answered "Yes" to question 28, what part of your overall education program would you like to see given via TV?</u>		
	Less than 10%	14	14.8
	10-40%	47	50.0
	40-60%	8	8.5
	60-80%	-	-
	80-100%	1	1.0

-continued-

TABLE 3 -- Continued

Quest. No.	Question and Response Option	N	%
20	<u>Why do you feel that Direct instruction is better than TV instruction?</u>		
	I get to ask questions	31	32.9
	I'm more inspired	31	32.9
	TV is too incomplete	-	-
21	<u>If you could hear a live lecture, no demonstrations, audience of 100 in a satisfactory, modern room, or watch the same lecture at the same time on TV in a similiar room, which would you choose?</u>		
	TV	20	21.1
	Live	72	76.5
22	<u>Why did you answer "TV" in question 21?</u>		
	More peaceful than the live lecture..	5	5.3
	Less crowded	4	4.2
	TV is just as efficient as live	17	18.0
	My friends went to the TV room	-	-
	I can do something else while the TV operates	4	4.2
23	<u>If a proctor were in the TV room, I'd:</u>		
	Go watch the live lecture	7	7.4
	Stay in the TV room	4	4.2
24	<u>I'd listen to the live lecture because:</u>		
	It makes me feel human	9	9.5
	My friends would be there	1	1.0
	I get more from Direct than from TV..	55	58.5
	Less crowded	-	-
	In a crowd I can sleep	-	-
25	<u>Direct teaching is generally:</u>		
	Entertaining	78	82.9
	Dull	12	12.7
	Communicative	90	95.7
	Hard to follow	3	3.1

-continued-

TABLE 3 -- Continued

Quest. No.	Question and Response Option	N	%
	Basic training	36	38.2
	Tech school	45	47.8
	College	34	36.1
	Adult education	43	45.7
	High school	29	30.8
	College	51	54.2
16	<u>I want more technology in my life:</u>		
	Agree	61	64.8
	Disagree	27	28.7
17	<u>I would learn more from a TV course if I had a studio tour before the class began:</u>		
	Agree	36	38.2
	Disagree	52	55.3
18	<u>Would you be inspired to do more research if the teaching you received was:</u>		
	Direct	77	81.9
	TV	14	14.8
19	<u>The quality of instruction I receive now is better via:</u>		
	Direct	83	88.2
	TV	2	2.1

-continued-

TABLE 3 -- Continued

Quest. No.	Question and Response Option	N	%
13	<u>Students indicated that they would enroll in these courses taught all by TV:</u>		
	History of Flight	-	-
	Battlefield Tactics	-	-
	Sociology	-	-
	Driver Safety	-	-
	Drug Abuse	-	-
	Math	-	-
	English	18	19.1
	Biology	-	-
	History	37	39.3
	Psychology	15	15.9
	Management	11	11.7
	Military Courtesy	31	32.9
	Basic Military Information	33	35.1
	Economics	12	12.7
	Theater	15	15.9
	Chemistry	36	38.2
	Flying	-	-
	Geography	-	-
	Nuclear Research	-	-
	Literature	-	-
14	<u>I believe that TV is most useful in:</u>		
	Military training	20	21.2
	College courses	10	10.6
	Adult education	30	31.9
	High school	5	5.3
	Grade school	10	10.6
15	<u>In which is TV more useful:</u>		
	Tech school	51	54.2
	High school	30	31.9

-continued-

TABLE 3 -- Continued

Quest. No.	Question and Response Options	N	%
6	<u>I'd receive a better grade from a course that was:</u>		
	TV	2	2.1
	Direct	55	58.5
	Mix	34	36.1
7	<u>I'd learn more from a course that was:</u>		
	TV	2	2.1
	Direct	49	52.1
	Mix	41	43.6
8	<u>I'd rather watch TV instruction via:</u>		
	Color	85	90.4
	Black and White	4	4.2
9	<u>The quality of videotapes I view is:</u>		
	Good	21	22.3
	Poor	20	21.2
	Average	51	54.2
10	<u>TV is best suited for:</u>		
	Demonstration	36	38.2
	Lecture	36	38.2
	No difference	34	36.1
11	<u>If TV were used in my classroom, I'd prefer it to be used:</u>		
	The entire period	5	5.3
	1/2 the period	45	47.8
	10 minutes per period	29	30.8
	Not at all	7	7.4
12	<u>I like TV in the classroom best when used:</u>		
	Daily	12	12.7
	Three time a week	41	43.6
	Once a week	29	30.8

-continued-

TABLE 3
ACADEMIC INSTRUCTOR SCHOOL
TV ATTITUDE DATA SUMMARY

Quest. No.	Question and Response Options	N	%
1	Not Applicable		
2	<u>What is your favorite type of class?</u>		
	Lecture	13	13.8
	Media	5	5.3
	Seminar	22	23.4
	Combination to include "Media"	43	45.7
	Combination without "Media"	8	8.5
3	<u>TV as an instructional tool is best suited for:</u>		
	Grade school	7	7.4
	Junior/High school	5	5.3
	College/Tech school	30	31.9
	Adult education programs	29	30.8
4	<u>A TV course is best suited for which sized audience?</u>		
	Small (less than 30)	39	41.4
	Medium (30-100)	10	10.6
	Large (100+)	23	24.4
	Never suited for classroom use	4	4.2
5	<u>If I knew that it would make no difference in my grade, I'd take a course taught via:</u>		
	TV	2	2.1
	Direct	55	58.5
	Mix	34	36.1

-continued-

TABLE 4 -- Continued

Quest. No.	Question and Response Option	N	%
13	<u>Students indicated that they would enroll in these courses taught all by TV:</u>		
	Management	15	15.6
	Urban Planning	10	10.4
	Economics	13	13.5
	Driver Safety	13	13.5
	Drug Abuse	10	10.4
	Math	11	11.4
	English	19	19.7
	Biology	11	11.2
	History	49	51.0
	Psychology	19	19.7
	Vehicle Maintenance	13	13.5
	Military Courtesy	13	13.5
	Basic Military Information	39	40.6
	Effective Writing	21	21.8
	Theater	18	18.7
	Foreign Language	-	-
	Flying	-	-
	Geography	31	32.2
	Military Tactics	11	11.4
	Literature	18	18.7
14	<u>I believe that TV is most useful in:</u>		
	Military training	14	14.5
	College courses	22	22.9
	Adult education	33	34.3
	High school	6	6.2
	Grade school	19	19.7
15	<u>In which is TV more useful:</u>		
	Tech school	57	59.3
	High school	33	34.3

-continued-

TABLE 4 -- Continued

Quest. No.	Question and Response Option	N	%
	Basic training	57	59.3
	Tech school	53	55.1
	College	36	36.9
	Adult education	55	57.2
	High school	45	46.8
	College	44	45.8
16	<u>I want more technology in my life:</u>		
	Agree	80	83.3
	Disagree	16	16.6
17	<u>I would learn more from a TV course if I had a studio tour before the class began:</u>		
	Agree	13	13.5
	Disagree	81	84.3
18	<u>Would you be inspired to do more research if the teaching you received was:</u>		
	Direct	84	87.5
	TV	12	12.5
19	<u>The quality of instruction I receive now is better via:</u>		
	Direct	87	90.6
	TV	9	9.3

-continued-

TABLE 4 -- Continued

Quest. No.	Question and Response Option	N	%
20	<u>Why do you feel that Direct instruction is better than TV instruction?</u>		
	I get to ask questions	34	35.4
	I'm more inspired	2	2.0
	TV is too incomplete	2	2.0
21	<u>If you could hear a live lecture, no demonstrations, audience of 100 in a satisfactory, modern room, or watch the same lecture at the same time on TV in a similar room, which would you choose?</u>		
	TV	18	18.7
	Live	77	80.2
22	<u>Why did you answer "TV" in question 21?</u>		
	More peaceful than the live lecture..	6	6.2
	Less crowded	9	9.3
	TV is just as efficient as live	11	11.4
	My friends went to the TV room	-	-
	I can do something else while the TV operates	2	2.0
23	<u>If a proctor were in the TV room, I'd:</u>		
	Go watch the live lecture	7	7.2
	Stay in the TV room	3	3.1
24	<u>I'd listen to the live lecture because:</u>		
	It makes me feel human	19	19.0
	My friends would be there	3	3.1
	I get more from Direct than from TV..	52	54.1
	Less crowded	1	1.0
	In a crowd I can sleep	-	-
25	<u>Direct teaching is generally:</u>		
	Entertaining	81	84.3
	Dull	15	15.6
	Communicative	93	96.8
	Hard to follow	3	3.1

-continued-

TABLE 4 -- Continued

Quest. No.	Question and Response Option	N	%
	Friendly	90	93.7
	Remote	6	6.2
	Fun	80	83.3
	Boring	14	14.5
26	<u>In a direct class, how many times do you ask questions?</u>		
	At least once a class	49	51.0
	Once every other class	25	26.0
	Once every third class	13	13.5
	Less	9	9.3
27	<u>I'd learn more from:</u>		
	Blackboard TV lecture	9	9.3
	Blackboard direct lecture	66	68.7
	Direct lecture	16	16.6
	TV lecture	4	4.1
28	<u>Would you like to have part of your education by TV?</u>		
	Yes	42	43.7
	No	27	28.1
29	<u>If you answered "Yes" to question 28, what part of your overall education program would you like to see given via TV?</u>		
	Less than 10%	6	6.2
	10-40%	40	41.6
	40-60%	1	1.0
	60-80%	-	-
	80-100%	-	-

-continued-

TABLE 4 -- Continued

Quest. No.	Question and Response Option	N	%
30	<u>Select each item you feel is a drawback to TV tapes:</u>		
	Dull	37	38.5
	Too fast	6	6.2
	Jargon	2	2.0
	Biased	10	10.4
	Religious attitude forced on audience.	-	-
	Manipulative	12	12.5
	Vague	18	18.7
	Confusing	3	3.1
	None of above	35	36.4
31	<u>Would you be interested in a course taught all by TV?</u>		
	Yes	22	22.9
	No	72	75.0
32	<u>I feel that TV effectiveness is reduced by the number of feet you are from the TV screen:</u>		
	Yes	71	73.9
	No	23	23.9
33	<u>If I could ask questions after a TV tape were shown, or I could leave, I'd:</u>		
	Leave	21	21.8
	Sit and listen to others' questions..	37	38.5
	Ask a question	35	36.4
34	<u>TV instruction is:</u>		
	Dull	69	71.8
	Lively	25	26.0
	Efficient	68	70.8
	Wasteful	24	25.0
	Fun	33	34.3
	Boring	60	62.5

-continued-

TABLE 4 -- Continued

Quest. No.	Question and Response Option	N	%
35	<u>Would you enjoy TV classes more if you knew that the teaching method had no grade impact?</u>		
	Yes	30	31.2
	No	65	67.7
36	<u>I'd rather not be exposed to any educational TV in my school environment:</u>		
	Agree	15	15.6
	Disagree	81	84.3
37	<u>I'd like to have CCTV available in my dormitory:</u>		
	Agree	66	68.7
	Disagree	26	27.0
38	<u>I'd like more tapes available at the nearest library:</u>		
	Agree	63	65.6
	Disagree	31	32.2
39	<u>When I eat in a military mess, I'd like to watch military films via TV:</u>		
	Agree	14	14.5
	Disagree	81	84.3
40	<u>I'd like access to all-night news shows via TV:</u>		
	Agree	72	75.0
	Disagree	24	25.0
41	<u>More basic training lectures should be given via TV:</u>		
	Agree	32	33.3
	Disagree	60	62.5

-continued-

TABLE 4 --Continued

Quest. No.	Question and Response Option	N	%
42	<u>More of my tech school courses could be taught via TV:</u>		
	Agree	30	31.2
	Disagree	62	64.5
43	<u>More ROTC lectures could be on TV tape:</u>		
	Agree	30	31.2
	Disagree	47	48.9
44	<u>I like TV in the classroom:</u>		
	Agree	62	64.5
	Disagree	32	33.3
45	<u>I want more TV in the classroom:</u>		
	Agree	28	29.1
	Disagree	66	68.7
46	<u>Teachers' skill being equal, in which type of class do you learn more?</u>		
	Lecture	36	37.5
	Media	8	8.3
	Seminar	52	54.1
47	<u>If the teacher were unskilled, in which type of class would you learn the most?</u>		
	Lecture	6	6.2
	Media	35	36.4
	Seminar	55	57.2
48	<u>If the teacher were outstanding, in which type of class would you learn the most?</u>		
	Lecture	52	54.1
	Media	5	5.2
	Seminar	39	40.6

-continued-

TABLE 4 -- Continued

Quest. No.	Question and Response Option	N	%
49	<u>How do you rate your military teachers overall compared to civilian teachers?</u>		
	Far better	11	11.4
	Somewhat better	28	29.1
	The same as civilian	35	36.4
	Somewhat worse	19	19.7
	Much worse	-	-
50	<u>If you had all your instruction via TV, would you learn as much as if you had traditional direct instruction?</u>		
	Yes	6	6.2
	No	76	79.1
	Don't know	11	11.4
51	<u>If all of your classes were presented via TV, do you feel the tapes could be good enough that you would rarely (less than once/two weeks) need to see a teacher face-to-face?</u>		
	Yes	16	16.6
	No	80	80.2
52	<u>Which is more honest, TV or a live teacher?</u>		
	No difference	45	46.8
	TV	6	6.2
	Teacher	45	46.8
53	<u>I would enjoy a course of my choice taught all by TV even if I never saw an instructor:</u>		
	Agree	39	40.6
	Disagree	57	59.3

-continued-

TABLE 4 -- Continued

Quest. No.	Question and Response Option	N	%
54	<u>I would enjoy a course of my choice taught by TV if I could see a teacher when I wanted to, but didn't have to:</u>		
	Agree	72	75.0
	Disagree	24	25.0
55	<u>I would take a course of my choice by TV if I could ask questions on the spot:</u>		
	Agree	84	87.5
	Disagree.	12	12.5
56	<u>A course that a teacher needs 50 min. to teach could be done in 35 min. by TV.</u>		
	Agree	16	16.6
	Disagree	32	33.0
	Perhaps	48	50.0
57	<u>I like the fact that an instructor won't call on me in a TV class:</u>		
	Agree	26	27.0
	Disagree	67	69.7
58	<u>Educational TV will reduce the number of faculty needed:</u>		
	Agree	36	37.5
	Disagree	30	31.2
	Don't know	29	30.2
N = 96			
Average age: 21+ (est. 26)			

CHAPTER 5

AIR FORCE INSTITUTE OF TECHNOLOGY

This chapter presents the questions, response options, and response distributions for students enrolled in the Masters program at the Air Force Institute of Technology, School of Systems and Logistics, Wright-Patterson AFB, Fairborn, Ohio.

The information in this chapter is significant because research suggests that the more educated the students, the less favorable will be their attitudes towards ITV. The students sampled at AFIT represent the highest education level of all of the students involved in the survey. The chapter results do indicate that many response selections represented the most resistive attitude towards ITV use.

TABLE 5
AIR FORCE INSTITUTE OF TECHNOLOGY
TV ATTITUDE DATA SUMMARY

Quest. No.	Question and Response Options	N	%
1	<u>M.S. graduate students.</u>		
2	<u>What is your favorite type of class?</u>		
	Lecture	50	89.2
	Media	4	7.1
	Seminar	-	-
	Combination to include "Media"	-	-
	Combination without "Media"	-	-
3	<u>TV as an instructional tool is best suited for:</u>		
	Grade school	13	25.0
	Junior/High school	8	14.2
	College/Tech school	8	14.2
	Adult education programs	18	33.9
4	<u>A TV course is best suited for which sized audience?</u>		
	Small (less than 30)	9	16.0
	Medium (30-100)	6	10.7
	Large (100+)	9	16.0
	Never suited for classroom use	18	33.9
5	<u>If I knew that it would make no difference in my grade, I'd take a course taught via:</u>		
	TV	7	12.5
	Direct	21	39.2
	Mix	22	41.0

-continued-

TABLE 5 -- Continued

Quest. No.	Question and Response Options	N	%
6	<u>I'd receive a better grade from a course that was:</u>		
	TV	3	5.3
	Direct	36	66.0
	Mix	12	23.2
7	<u>I'd learn more from a course that was:</u>		
	TV	1	1.7
	Direct	35	64.2
	Mix	15	28.5
8	<u>I'd rather watch TV instruction via:</u>		
	Color	43	80.3
	Black and White	7	12.5
9	<u>The quality of videotapes I view is:</u>		
	Good	9	16.0
	Poor	17	32.1
	Average	24	44.6
10	<u>TV is best suited for:</u>		
	Demonstration	7	12.5
	Lecture	35	64.2
	No difference	8	14.2
11	<u>If TV were used in my classroom, I'd prefer it to be used:</u>		
	The entire period	4	7.1
	1/2 the period	12	21.4
	10 minutes per period	16	30.3
	Not at all	16	30.3
12	<u>I like TV in the classroom best when used:</u>		
	Daily	6	10.7
	Three time a week	8	14.2
	Once a week	32	58.9

-continued-

TABLE 5 -- Continued

Quest. No.	Question and Response Option	N	%
13	<u>Students indicated that they would enroll in these courses taught all by TV:</u>		
	Library Science	7	12.5
	Battlefield Tactics	-	-
	Sociology	-	-
	Driver Safety	-	-
	Drug Abuse	-	-
	Math	6	10.7
	English	-	-
	Biology	-	-
	History	19	35.7
	Psychology	6	10.7
	Vehicle Maintenance	8	14.2
	Military Courtesy	17	32.1
	Basic Military Information	13	25.0
	Air Force Correspondence	10	17.8
	Theater	11	19.6
	Foreign Language	-	-
	Flying	-	-
	Geography	14	26.7
	Economics	7	12.5
	Literature	6	10.7
14	<u>I believe that TV is most useful in:</u>		
	Military training	7	12.5
	College courses	3	5.3
	Adult education	14	26.7
	High school	5	8.9
	Grade school	18	33.9
15	<u>In which is TV more useful:</u>		
	Tech school	22	41.0
	High school	21	39.2

-continued-

TABLE 5 -- Continued

Quest. No.	Question and Response Option	N	%
	Basic training	26	48.2
	Tech school	11	19.6
	College	10	17.8
	Adult education ..	37	67.8
	High school	33	60.7
	College	12	21.4
16	<u>I want more technology in my life:</u>		
	Agree	39	71.4
	Disagree	13	25.0
17	<u>I would learn more from a TV course if</u> <u>I had a studio tour before the class</u> <u>began:</u>		
	Agree	10	17.8
	Disagree	39	71.4
18	<u>Would you be inspired to do more</u> <u>research if the teaching you received</u> <u>was:</u>		
	Direct	45	83.9
	TV	5	8.9
19	<u>The quality of instruction I receive</u> <u>now is better via:</u>		
	Direct	44	82.1
	TV	4	7.1

-continued-

TABLE 6 -- Continued

Quest. No.	Question and Response Option	N	%
	Friendly	36	82.2
	Remote	6	13.3
		37	
	Fun	5	84.4
	Boring		11.1
26	<u>In a direct class, how many times do you ask questions?</u>		
	At least once a class	23	51.1
	Once every other class	7	15.5
	Once every third class	10	22.2
	Less	4	8.8
27	<u>I'd learn more from:</u>		
	Blackboard TV lecture	4	8.8
	Blackboard direct lecture	29	66.6
	Direct lecture	6	13.3
	TV lecture	3	6.6
28	<u>Would you like to have part of your education by TV?</u>		
	Yes	24	53.3
	No	20	44.4
29	<u>If you answered "Yes" to question 28, what part of your overall education program would you like to see given via TV?</u>		
	Less than 10%	8	17.7
	10-40%	22	48.8
	40-60%	3	6.6
	60-80%	-	0.0
	80-100%	1	2.2

-continued-

TABLE 6 -- Continued

Quest. No.	Question and Response Option	N	%
20	<u>Why do you feel that Direct instruction is better than TV instruction?</u>		
	I get to ask questions	34	77.7
	I'm more inspired	7	15.5
	TV is too incomplete	-	0.0
21	<u>If you could hear a live lecture, no demonstrations, audience of 100 in a satisfactory, modern room, or watch the same lecture at the same time on TV in a similar room, which would you choose?</u>		
	TV	13	28.8
	Live	29	66.6
22	<u>Why did you answer "TV" in question 21?</u>		
	More peaceful than the live lecture..	8	17.7
	Less crowded	10	22.2
	TV is just as efficient as live	3	6.6
	My friends went to the TV room	-	0.0
	I can do something else while the TV operates	1	2.1
23	<u>If a proctor were in the TV room, I'd:</u>		
	Go watch the live lecture	5	11.1
	Stay in the TV room	4	8.8
24	<u>I'd listen to the live lecture because:</u>		
	It makes me feel human	9	20.0
	My friends would be there	3	6.6
	I get more from Direct than from TV..	20	44.4
	Less crowded	1	2.2
	In a crowd I can sleep	2	4.4
25	<u>Direct teaching is generally:</u>		
	Entertaining	28	64.4
	Dull	13	28.8
	Communicative	34	77.7
	Hard to follow	8	17.7

-continued-

TABLE 6 -- Continued

Quest. No.	Question and Response Option	N	%
	Basic training	24	53.3
	Tech school	8	17.7
		21	
	College	21	46.6
	Adult education	23	46.6
		18	
	High school		51.1
	College		40.0
16	<u>I want more technology in my life:</u>		
	Agree	33	75.5
	Disagree	10	22.0
17	<u>I would learn more from a TV course if I had a studio tour before the class began:</u>		
	Agree	15	33.3
	Disagree	28	64.4
18	<u>Would you be inspired to do more research if the teaching you received was:</u>		
	Direct	34	77.7
	TV	9	20.0
19	<u>The quality of instruction I receive now is better via:</u>		
	Direct	34	77.7
	TV	7	15.0

-continued-

TABLE 6 -- Continued

Quest. No.	Question and Response Option	N	%
13	<u>Students indicated that they would enroll in these courses taught all by TV:</u>		
	Management	5	11.1
	Jet Engine Maintenance	5	11.1
	TV Studio Operatopns	5	11.1
	Urban Planning	5	11.1
	Drug Abuse	9	20.0
	Math	9	20.0
	English	6	13.3
	Biology	6	13.3
	History	17	37.7
	Psychology	-	-
	Vehicle Maintenance	8	17.7
	Military Courtesy	7	15.5
	Basic Military Information	12	26.6
	Effective Writing	6	13.3
	Theater	7	16.3
	Foreign Language	-	-
	Flying	7	15.5
	Geography	8	17.7
	Nuclear Research	-	-
	Literature	5	11.1
14	<u>I belive that TV is most useful in:</u>		
	Military training	13	28.8
	College courses	9	20.0
	Adult education	6	13.3
	High school	7	15.5
	Grade school	7	15.5
15	<u>In which is TV more useful:</u>		
	Tech school	25	57.7
	High school	16	35.5

-continued-

TABLE 6 -- Continued

Quest. No.	Question and Response Options	N	%
6	<u>I'd receive a better grade from a course that was:</u>		
	TV	4	8.8
	Direct	18	40.0
	Mix	22	48.8
7	<u>I'd learn more from a course that was:</u>		
	TV	2	4.4
	Direct	22	48.8
	Mix	20	44.4
8	<u>I'd rather watch TV instruction via:</u>		
	Color	41	93.3
	Black and White	-	0.0
9	<u>The quality of videotapes I view is:</u>		
	Good	15	33.3
	Poor	8	17.7
	Average	20	44.4
10	<u>TV is best suited for:</u>		
	Demonstration	5	11.1
	Lecture	22	48.8
	No difference	12	26.6
11	<u>If TV were used in my classroom, I'd prefer it to be used:</u>		
	The entire period	2	4.4
	1/2 the period	24	53.3
	10 minutes per period	7	15.5
	Not at all	6	13.3
12	<u>I like TV in the classroom best when used:</u>		
	Daily	7	15.5
	Three time a week	10	22.2
	Once a week	21	46.6

continued

TABLE 6
PUEBLO ARMY ROTC
TV ATTITUDE DATA SUMMARY

Quest. No.	Question and Response Options	N	%
1	I am a:		
	Senior	9	20.0
	Junior	20	44.4
	Sophomore	6	13.3
	Freshman	9	20.0
2	<u>What is your favorite type of class?</u>		
	Lecture	11	24.4
	Media	7	15.5
	Seminar	7	15.5
	Combination to include "Media"	13	28.8
	Combination without "Media"	6	13.3
3	<u>TV as an instructional tool is best suited for:</u>		
	Grade school	8	17.7
	Junior/High school	8	17.7
	College/Tech school	17	37.7
	Adult education programs	9	20.0
4	<u>A TV course is best suited for which sized audience?</u>		
	Small (less than 30)	20	44.4
	Medium (30-100)	5	11.1
	Large (100+)	8	17.7
	Never suited for classroom use	9	20.0
5	<u>If I knew that it would make no difference in my grade, I'd take a course taught via:</u>		
	TV	8	17.7
	Direct	11	24.4
	Mix	9	53.3

-continued-

CHAPTER 6

ROTC

This chapter presents the questions, response options, and response distributions for students enrolled in ROTC at three units in Colorado: Colorado Springs, Ft. Collins, and Pueblo.

The information in this chapter is significant because these were the only students examined who lived primarily in a civilian educational environment, even though they were military students. Research suggests that the nature of the military school environment may result in the students valuing the live classroom teacher much more than would their civilian counterparts. This is because the military school environment restricts the range of communication options, so that the option of communicating with the instructor is much more valuable to a military student living in a restricted environment than would be the case for a student at a civilian school.

TABLE 5 -- Continued

Quest. No.	Question and Response Option	N	%
54	<u>I would enjoy a course of my choice taught by TV if I could see a teacher when I wanted to, but didn't have to:</u>		
	Agree	36	66.0
	Disagree	16	30.3
55	<u>I would take a course of my choice by TV if I could ask questions on the spot:</u>		
	Agree	42	78.5
	Disagree	10	17.8
56	<u>A course that a teacher needs 50 min. to teach could be done in 35 min. by TV.</u>		
	Agree	8	14.2
	Disagree	18	33.9
	Perhaps	26	48.2
57	<u>I like the fact that an instructor won't call on me in a TV class:</u>		
	Agree	14	26.7
	Disagree	32	58.9
58	<u>Educational TV will reduce the number of faculty needed:</u>		
	Agree	17	32.1
	Disagree	14	26.7
	Don't know	19	35.7

N = 54

Average age: 21+ (est. 28) graduate students.

TABLE 5 -- Continued

Quest. No.	Question and Response Option	N	%
49	<u>How do you rate your military teachers overall compared to civilian teachers?</u>		
	Far better	2	3.5
	Somewhat better	4	7.1
	The same as civilian	32	58.9
	Somewhat worse	10	17.8
	Much worse	5	8.9
50	<u>If you had all your instruction via TV, would you learn as much as if you had traditional direct instruction?</u>		
	Yes	2	3.5
	No	39	71.4
	Don't know	11	19.6
51	<u>If all of your classes were presented via TV, do you feel the tapes could be good enough that you would rarely (less than once/two weeks) need to see a teacher face-to-face?</u>		
	Yes	14	26.7
	No	37	67.8
52	<u>Which is more honest, TV or a live teacher?</u>		
	No difference	19	35.7
	TV	8	14.2
	Teacher	22	41.0
53	<u>I would enjoy a course of my choice taught all by TV even if I never saw an instructor:</u>		
	Agree	23	42.8
	Disagree	29	53.5

-continued-

TABLE 5 -- Continued

Quest. No.	Question and Response Option	N	%
42	<u>More of my tech school courses could be taught via TV:</u>		
	Agree	13	25.0
	Disagree	35	64.2
43	<u>More ROTC lectures could be on TV tape:</u>		
	Agree	16	30.3
	Disagree	22	41.0
44	<u>I like TV in the classroom:</u>		
	Agree	18	33.9
	Disagree	31	57.1
45	<u>I want more TV in the classroom:</u>		
	Agree	12	21.4
	Disagree	38	69.6
46	<u>Teachers' skill being equal, in which type of class do you learn more?</u>		
	Lecture	27	50.0
	Media	3	5.3
	Seminar	21	39.2
47	<u>If the teacher were unskilled, in which type of class would you learn the most?</u>		
	Lecture	10	17.8
	Media	19	35.7
	Seminar	22	41.0
48	<u>If the teacher were outstanding, in which type of class would you learn the most?</u>		
	Lecture	39	71.4
	Media	4	7.1
	Seminar	10	17.8

-continued-

TABLE 5 -- Continued

Quest. No.	Question and Response Option	N	%
35	<u>Would you enjoy TV classes more if you knew that the teaching method had no grade impact?</u>		
	Yes	13	25.0
	No	36	66.0
36	<u>I'd rather not be exposed to any educational TV in my school environment:</u>		
	Agree	17	32.1
	Disagree	33	60.7
37	<u>I'd like to have CCTV available in my dormitory:</u>		
	Agree	18	33.9
	Disagree	23	42.8
38	<u>I'd like more tapes available at the nearest library:</u>		
	Agree	23	42.8
	Disagree	20	37.5
39	<u>When I eat in a military mess, I'd like to watch military films via TV:</u>		
	Agree	4	7.1
	Disagree	44	82.1
40	<u>I'd like access to all-night news shows via TV:</u>		
	Agree	33	60.7
	Disagree	19	35.7
41	<u>More basic training lectures should be given via TV:</u>		
	Agree	17	32.1
	Disagree	32	58.9

-continued-

TABLE 5 -- Continued

Quest. No.	Question and Response Option	N	%
30	<u>Select each item you feel is a drawback to TV tapes:</u>		
	Dull	14	26.7
	Too fast	8	14.2
	Jargon	-	-
	Biased	5	8.9
	Religious attitude forced on audience.	2	3.5
	Manipulative	2	3.5
	Vague	7	12.5
	Confusing	3	5.3
	None of above	23	42.8
31	<u>Would you be interested in a course taught all by TV?</u>		
	Yes	9	16.0
	No	42	78.5
32	<u>I feel that TV effectiveness is reduced by the number of feet you are from the TV screen:</u>		
	Yes	17	60.7
	No	15	28.5
33	<u>If I could ask questions after a TV tape were shown, or I could leave, I'd:</u>		
	Leave	17	32.1
	Sit and listen to others' questions..	13	25.0
	Ask a question	18	33.9
34	<u>TV instruction is:</u>		
	Dull	37	67.8
	Lively	10	17.8
	Efficient	26	48.2
	Wasteful	20	37.5
	Fun	14	26.7
	Boring	32	58.9

-continued-

TABLE 5 -- Continued

Quest. No.	Question and Response Option	N	%
	Friendly	45	83.9
	Remote	5	8.9
	Fun	37	67.8
	Boring	10	17.8
26	<u>In a direct class, how many times do you ask questions?</u>		
	At least once a class	21	39.2
	Once every other class	14	26.7
	Once every third class	6	10.7
	Less	11	19.6
27	<u>I'd learn more from:</u>		
	Blackboard TV lecture	4	7.1
	Blackboard direct lecture	41	76.7
	Direct lecture	5	8.9
	TV lecture	-	-
28	<u>Would you like to have part of your education by TV?</u>		
	Yes	18	33.9
	No	34	62.5
29	<u>If you answered "Yes" to question 28, what part of your overall education program would you like to see given via TV?</u>		
	Less than 10%	7	12.5
	10-40%	13	25.0
	40-60%	3	5.3
	60-80%	-	-
	80-100%	2	3.5

-continued-

Quest. No.	Question and Response Option	N	%
20	<u>Why do you feel that Direct instruction is better than TV instruction?</u>		
	I get to ask questions	16	30.3
	I'm more inspired	1	1.7
	TV is too incomplete	-	-
21	<u>If you could hear a live lecture, no demonstrations, audience of 100 in a satisfactory, modern room, or watch the same lecture at the same time on TV in a similiar room, which would you choose?</u>		
	TV	12	21.4
	Live	40	73.2
22	<u>Why did you answer "TV" in question 21?</u>		
	More peaceful than the live lecture..	3	5.3
	Less crowded	4	7.1
	TV is just as efficient as live	7	12.5
	My friends went to the TV room	-	-
	I can do something else while the TV operates	-	-
23	<u>If a proctor were in the TV room, I'd:</u>		
	Go watch the live lecture	3	5.3
	Stay in the TV room	4	7.1
24	<u>I'd listen to the live lecture because:</u>		
	It makes me feel human	9	16.0
	My friends would be there	1	1.7
	I get more from Direct than from TV..	29	53.5
	Less crowded	-	-
	In a crowd I can sleep	-	-
25	<u>Direct teaching is generally:</u>		
	Entertaining	36	66.0
	Dull	15	28.5
	Communicative	42	78.5
	Hard to follow	9	16.0

-continued-

TABLE 6 -- Continued

Quest. No.	Question and Response Option	N	%
30	<u>Select each item you feel is a drawback to TV tapes:</u>		
	Dull	6	13.3
	Too fast	11	24.4
	Jargon	3	6.6
	Biased	1	2.2
	Religious attitude forced on audience.	3	6.6
	Manipulative	8	17.7
	Vague	6	13.3
	Confusing	2	4.4
	None of above	14	31.1
31	<u>Would you be interested in a course taught all by TV?</u>		
	Yes	10	22.2
	No	29	66.6
32	<u>I feel that TV effectiveness is reduced by the number of feet you are from the TV screen:</u>		
	Yes	26	60.0
	No	13	28.8
33	<u>If I could ask questions after a TV tape were shown, or I could leave, I'd:</u>		
	Leave	5	11.1
	Sit and listen to others' questions..	17	37.7
	Ask a question	18	40.0
34	<u>TV instruction is:</u>		
	Dull	23	53.3
	Lively	17	37.7
	Efficient	27	62.2
	Wasteful	13	28.8
	Fun	16	35.5
	Boring	24	55.5

-continued-

APPENDIX B -- Continued

Quest. No.	Question and Response Option	N	%
35	<u>Would you enjoy TV classes more if you knew that the teaching method had no grade impact?</u>		
	Yes	24	53.3
	No	20	44.4
36	<u>I'd rather not be exposed to any educational TV in my school environment:</u>		
	Agree	13	28.8
	Disagree	20	68.8
37	<u>I'd like to have CCTV available in my dormitory:</u>		
	Agree	29	66.6
	Disagree	12	26.6
38	<u>I'd like more tapes available at the nearest library:</u>		
	Agree	29	66.6
	Disagree	14	31.1
39	<u>When I eat in a military mess, I'd like to watch military films via TV:</u>		
	Agree	9	20.0
	Disagree	34	77.7
40	<u>I'd like access to all-night news shows via TV:</u>		
	Agree	25	57.7
	Disagree	18	40.0
41	<u>More basic training lectures should be given via TV:</u>		
	Agree	14	31.1
	Disagree	28	64.4

-continued-

TABLE 6 -- Continued

Quest. No.	Question and Response Option	N	%
42	<u>More of my tech school courses could be taught via TV:</u>		
	Agree	21	46.6
	Disagree	19	42.2
43	<u>More ROTC lectures could be on TV tape:</u>		
	Agree	24	55.5
	Disagree	19	42.2
44	<u>I like TV in the classroom:</u>		
	Agree	23	51.1
	Disagree	21	46.6
45	<u>I want more TV in the classroom:</u>		
	Agree	23	51.1
	Disagree	21	46.6
46	<u>Teachers' skill being equal, in which type of class do you learn more?</u>		
	Lecture	20	44.4
	Media	7	15.5
	Seminar	17	37.7
47	<u>If the teacher were unskilled, in which type of class would you learn the most?</u>		
	Lecture	3	6.6
	Media	25	57.7
	Seminar	15	33.3
48	<u>If the teacher were outstanding, in which type of class would you learn the most?</u>		
	Lecture	32	73.3
	Media	5	11.1
	Seminar	6	13.3

-continued-

TABLE 6 -- Continued

Quest. No.	Question and Response Option	N	%
49	<u>How do you rate your military teachers overall compared to civilian teachers?</u>		
	Far better	4	8.8
	Somewhat better	14	31.1
	The same as civilian	21	46.6
	Somewhat worse	3	6.6
	Much worse	2	4.4
50	<u>If you had all your instruction via TV, would you learn as much as if you had traditional direct instruction?</u>		
	Yes	4	8.8
	No	19	42.2
	Don't know	21	46.6
51	<u>If all of your classes were presented via TV, do you feel the tapes could be good enough that you would rarely (less than once/two weeks) need to see a teacher face-to-face?</u>		
	Yes	12	26.6
	No	30	68.8
52	<u>Which is more honest, TV or a live teacher?</u>		
	No difference	18	40.0
	TV	5	11.1
	Teacher	21	46.6
53	<u>I would enjoy a course of my choice taught all by TV even if I never saw an instructor:</u>		
	Agree	21	46.6
	Disagree	25	56.6

-continued-

TABLE 6 -- Continued

Quest. No.	Question and Response Option	N	%
54	<u>I would enjoy a course of my choice taught by TV if I could see a teacher when I wanted to, but didn't have to:</u>		
	Agree	33	75.5
	Disagree	9	20.0
55	<u>I would take a course of my choice by TV if I could ask questions on the spot:</u>		
	Agree	34	77.7
	Disagree.	9	20.0
56	<u>A course that a teacher needs 50 min. to teach could be done in 35 min. by TV.</u>		
	Agree	7	15.5
	Disagree	15	33.3
	Perhaps	22	48.8
57	<u>I like the fact that an instructor won't call on me in a TV class:</u>		
	Agree	14	31.1
	Disagree	28	64.4
58	<u>Educational TV will reduce the number of faculty needed:</u>		
	Agree	17	37.7
	Disagree	13	28.8
	Don't know	14	31.1
N = 44			
Average age: 21			

TABLE 7
FT COLLINS ROTC
TV ATTITUDE DATA SUMMARY

Quest. No.	Question and Response Options	N	%
1	I am a:		
	Senior	17	43.5
	Junior	2	5.1
	Sophomore	15	38.4
	Freshman	1	2.5
2	<u>What is your favorite type of class?</u>		
	Lecture	17	43.4
	Media	3	7.6
	Seminar	4	10.2
	Combination to include "Media"	9	23.0
	Combination without "Media"	5	12.8
3	<u>TV as an instructional tool is best suited for:</u>		
	Grade school	8	20.5
	Junior/High school	5	12.8
	College/Tech school	6	15.3
	Adult education programs	17	43.5
4	<u>A TV course is best suited for which sized audience?</u>		
	Small (less than 30)	7	17.9
	Medium (30-100)	4	10.2
	Large (100+)	5	12.8
	Never suited for classroom use	12	30.7
5	<u>If I knew that it would make no difference in my grade, I'd take a course taught via:</u>		
	TV	5	12.8
	Direct	16	41.0
	Mix	17	43.5

-continued-

TABLE 7 -- Continued

Quest. No.	Question and Response Options	N	%
6	<u>I'd receive a better grade from a course that was:</u>		
	TV	5	12.8
	Direct	16	41.0
	Mix	17	43.5
7	<u>I'd learn more from a course that was:</u>		
	TV	-	0.0
	Direct	26	69.2
	Mix	11	28.2
8	<u>I'd rather watch TV instruction via:</u>		
	Color	19	51.2
	Black and White	-	0.0
9	<u>The quality of videotapes I view is:</u>		
	Good	5	12.8
	Poor	8	20.5
	Average	7	17.9
10	<u>TV is best suited for:</u>		
	Demonstration	4	10.2
	Lecture	11	28.2
	No difference	5	12.8
11	<u>If TV were used in my classroom, I'd prefer it to be used:</u>		
	The entire period	2	5.1
	1/2 the period	6	15.3
	10 minutes per period	6	15.3
	Not at all	6	15.3
12	<u>I like TV in the classroom best when used:</u>		
	Daily	3	7.6
	Three time a week	2	5.1
	Once a week	12	30.7

-continued-

TABLE 7 -- Continued

Quest. No.	Question and Response Option	N	%
13	<u>Students indicated that they would enroll in these courses taught all by TV:</u>		
	Management	-	-
	Jet Engine Maintenance	-	-
	Library Science	4	10.2
	Urban Planning	-	-
	Drug Abuse	-	-
	Math	-	-
	English	8	20.5
	Philosophy	4	10.2
	History	12	30.7
	Economics	5	12.8
	Military Tactics	8	20.5
	Military Courtesy	14	35.8
	Basic Military Information	12	30.7
	Effective Writing	4	10.2
	Theater	5	12.8
	AF Correspondence	6	15.3
	Flying	-	-
	Geography	11	28.2
	Psychology	8	20.5
	Literature	5	12.8
14	<u>I believe that TV is most useful in:</u>		
	Military training	2	5.1
	College courses	5	12.8
	Adult education	17	43.5
	High school	3	7.6
	Grade school	7	17.9
15	<u>In which is TV more useful:</u>		
	Tech school	10	25.6
	High school	9	23.0

-continued-

TABLE 7 -- Continued

Quest. No.	Question and Response Option	N	%
	Basic training	13	33.3
	Tech school	4	10.2
	College	4	10.2
	Adult education	14	35.8
	High school	12	30.7
	College	7	17.9
16	<u>I want more technology in my life:</u>		
	Agree	21	56.4
	Disagree	8	20.5
17	<u>I would learn more from a TV course if I had a studio tour before the class began:</u>		
	Agree	5	12.8
	Disagree	18	48.7
18	<u>Would you be inspired to do more research if the teaching you received was:</u>		
	Direct	32	84.6
	TV	5	12.8
19	<u>The quality of instruction I receive now is better via:</u>		
	Direct	32	84.6
	TV	5	12.8

-continued-

TABLE 7 -- Continued

Quest. No.	Question and Response Option	N	%
20	<u>Why do you feel that Direct instruction is better than TV instruction?</u>		
	I get to ask questions	10	25.6
	I'm more inspired	-	00.0
	TV is too incomplete	-	0.0
21	<u>If you could hear a live lecture, no demonstrations, audience of 100 in a satisfactory, modern room, or watch the same lecture at the same time on TV in a similar room, which would you choose?</u>		
	TV	6	15.3
	Live	30	79.4
22	<u>Why did you answer "TV" in question 21?</u>		
	More peaceful than the live lecture..	6	15.3
	Less crowded	-	00.0
	TV is just as efficient as live	6	15.3
	My friends went to the TV room	-	0.0
	I can do something else while the TV operates	1	2.5
23	<u>If a proctor were in the TV room, I'd:</u>		
	Go watch the live lecture	1	2.5
	Stay in the TV room	2	5.1
24	<u>I'd listen to the live lecture because:</u>		
	It makes me feel human	6	15.3
	My friends would be there	1	2.5
	I get more from Direct than from TV..	20	53.8
	Less crowded	1	2.5
	In a crowd I can sleep	-	0.0
25	<u>Direct teaching is generally:</u>		
	Entertaining	26	69.2
	Dull	10	25.6
	Communicative	33	87.1
	Hard to follow	3	7.6

-continued-

TABLE 7 -- Continued

Quest. No.	Question and Response Option	N	%
	Friendly	31	82.0
	Remote	5	12.8
		26	
	Fun	7	69.2
	Boring		17.9
26	<u>In a direct class, how many times do you ask questions?</u>		
	At least once a class	6	15.3
	Once every other class	14	35.8
	Once every third class	8	20.5
	Less	10	25.6
27	<u>I'd learn more from:</u>		
	Blackboard TV lecture	2	5.1
	Blackboard direct lecture	25	66.6
	Direct lecture	5	12.8
	TV lecture	3	7.6
28	<u>Would you like to have part of your education by TV?</u>		
	Yes	13	33.3
	No	22	58.8
29	<u>If you answered "Yes" to question 28, what part of your overall education program would you like to see given via TV?</u>		
	Less than 10%	3	7.6
	10-40%	13	33.3
	40-60%	1	2.5
	60-80%	-	0.0
	80-100%	-	0.0

-continued-

TABLE 7 -- Continued

Quest. No.	Question and Response Option	N	%
30	<u>Select each item you feel is a drawback to TV tapes:</u>		
	Dull	15	38.4
	Too fast	2	5.1
	Jargon	1	2.5
	Biased	-	0.0
	Religious attitude forced on audience.	-	0.0
	Manipulative	3	7.6
	Vague	10	25.6
	Confusing	-	0.0
	None of above	16	41.0
31	<u>Would you be interested in a course taught all by TV?</u>		
	Yes	5	12.8
	No	31	82.0
32	<u>I feel that TV effectiveness is reduced by the number of feet you are from the TV screen:</u>		
	Yes	24	64.1
	No	13	33.3
33	<u>If I could ask questions after a TV tape were shown, or I could leave, I'd:</u>		
	Leave	5	12.8
	Sit and listen to others' questions..	17	46.1
	Ask a question	15	38.4
34	<u>TV instruction is:</u>		
	Dull	28	74.3
	Lively	7	17.9
	Efficient	19	51.2
	Wasteful	13	33.3
	Fun	9	23.0
	Boring	24	64.1

-continued-

TABLE 7 -- Continued

Quest. No.	Question and Response Option	N	%
35	<u>Would you enjoy TV classes more if you knew that the teaching method had no grade impact?</u>		
	Yes	14	35.8
	No	20	53.8
36	<u>I'd rather not be exposed to any educational TV in my school environment:</u>		
	Agree	13	33.3
	Disagree	17	46.1
37	<u>I'd like to have CCTV available in my dormitory:</u>		
	Agree	19	51.2
	Disagree	9	23.0
38	<u>I'd like more tapes available at the nearest library:</u>		
	Agree	17	46.1
	Disagree	11	28.2
39	<u>When I eat in a military mess, I'd like to watch military films via TV:</u>		
	Agree	8	20.5
	Disagree	18	48.7
40	<u>I'd like access to all-night news shows via TV:</u>		
	Agree	17	46.1
	Disagree	11	28.2
41	<u>More basic training lectures should be given via TV:</u>		
	Agree	8	20.5
	Disagree	17	46.1

-continued-

TABLE 7 -- Continued

Quest. No.	Question and Response Option	N	%
42	<u>More of my tech school courses could be taught via TV:</u>		
	Agree	7	17.9
	Disagree	18	48.7
43	<u>More ROTC lectures could be on TV tape:</u>		
	Agree	11	28.2
	Disagree	16	41.0
44	<u>I like TV in the classroom:</u>		
	Agree	9	23.0
	Disagree	16	41.0
45	<u>I want more TV in the classroom:</u>		
	Agree	5	12.8
	Disagree	15	38.4
46	<u>Teachers' skill being equal, in which type of class do you learn more?</u>		
	Lecture	21	56.4
	Media	7	17.9
	Seminar	9	23.0
47	<u>If the teacher were unskilled, in which type of class would you learn the most?</u>		
	Lecture	5	12.8
	Media	24	64.1
	Seminar	5	15.3
48	<u>If the teacher were outstanding, in which type of class would you learn the most?</u>		
	Lecture	29	76.9
	Media	1	2.5
	Seminar	7	17.9

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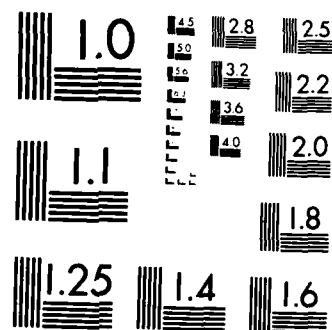
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

TABLE 7 -- Continued

Quest. No.	Question and Response Option	N	%
49	<u>How do you rate your military teachers overall compared to civilian teachers?</u>		
	Far better	1	2.5
	Somewhat better	13	33.3
	The same as civilian	19	51.2
	Somewhat worse	4	10.2
	Much worse	-	0.0
50	<u>If you had all your instruction via TV, would you learn as much as if you had traditional direct instruction?</u>		
	Yes	3	7.6
	No	26	69.2
	Don't know	6	15.3
51	<u>If all of your classes were presented via TV, do you feel the tapes could be good enough that you would rarely (less than once/two weeks) need to see a teacher face-to-face?</u>		
	Yes	9	23.0
	No	25	66.6
52	<u>Which is more honest, TV or a live teacher?</u>		
	No difference	19	51.2
	TV	2	5.1
	Teacher	16	41.0
53	<u>I would enjoy a course of my choice taught all by TV even if I never saw an instructor:</u>		
	Agree	11	28.2
	Disagree	25	66.6

-continued-

TABLE 7 -- Continued

Quest. No.	Question and Response Option	N	%
54	<u>I would enjoy a course of my choice taught by TV if I could see a teacher when I wanted to, but didn't have to:</u>		
	Agree	21	56.4
	Disagree	16	41.0
55	<u>I would take a course of my choice by TV if I could ask questions on the spot:</u>		
	Agree	31	82.0
	Disagree.	6	15.3
56	<u>A course that a teacher needs 50 min. to teach could be done in 35 min. by TV.</u>		
	Agree	5	12.8
	Disagree	16	41.0
	Perhaps	-	00.0
57	<u>I like the fact that an instructor won't call on me in a TV class:</u>		
	Agree	6	15.3
	Disagree	15	38.4
58	<u>Educational TV will reduce the number of faculty needed:</u>		
	Agree	11	28.2
	Disagree	6	15.3
	Don't know	5	12.8
N = 38			
Average age: 21			

TABLE 8
 COLORADO SPRINGS ARMY ROTC
 TV ATTITUDE DATA SUMMARY

Quest. No.	Question and Response Options	N	%
1	I am a:		
	Senior	6	21.4
	Junior	7	25.0
	Sophomore	3	12.4
	Freshman	9	32.1
2	<u>What is your favorite type of class?</u>		
	Lecture	9	32.1
	Media	2	7.1
	Seminar	2	7.1
	Combination to include "Media"	13	46.4
	Combination without "Media"	2	7.1
3	<u>TV as an instructional tool is best suited for:</u>		
	Grade school	13	32.1
	Junior/High school	5	17.8
	College/Tech school	7	25.0
	Adult education programs	6	21.4
4	<u>A TV course is best suited for which sized audience?</u>		
	Small (less than 30)	6	21.4
	Medium (30-100)	3	10.7
	Large (100+)	5	17.8
	Never suited for classroom use	11	39.2
5	<u>If I knew that it would make no difference in my grade, I'd take a course taught via:</u>		
	TV	-	00.0
	Direct	14	50.0
	Mix	14	50.0

-continued-

TABLE 8 -- Continued

Quest. No.	Question and Response Options	N	%
6	<u>I'd receive a better grade from a course that was:</u>		
	TV	-	0.0
	Direct	14	50.0
	Mix	14	50.0
7	<u>I'd learn more from a course that was:</u>		
	TV	1	3.5
	Direct	15	53.5
	Mix	12	42.8
8	<u>I'd rather watch TV instruction via:</u>		
	Color	19	67.8
	Black and White	3	10.7
9	<u>The quality of videotapes I view is:</u>		
	Good	5	17.8
	Poor	7	25.0
	Average	14	50.0
10	<u>TV is best suited for:</u>		
	Demonstration	3	10.7
	Lecture	10	35.7
	No difference	12	42.8
11	<u>If TV were used in my classroom, I'd prefer it to be used:</u>		
	The entire period	1	3.5
	1/2 the period	12	42.8
	10 minutes per period	7	25.0
	Not at all	7	25.0
12	<u>I like TV in the classroom best when used:</u>		
	Daily	5	17.8
	Three time a week	7	25.0
	Once a week	11	39.2

-continued-

TABLE 8 -- Continued

Quest. No.	Question and Response Option	N	%
13	<u>Students indicated that they would enroll in these courses taught all by TV:</u>		
	Management	-	-
	Jet Engine Maintenance	-	-
	TV Studio Operations	3	10.7
	Urban Planning	-	-
	Drug Abuse	-	-
	Math	6	21.4
	English	5	17.8
	Biology	4	14.2
	History	11	39.2
	Psychology	7	25.0
	Vehicle Maintenance	-	-
	Military Courtesy	10	35.7
	Basic Military Information	9	32.1
	Effective Writing	3	10.7
	Theater	3	10.7
	Foreign Language	3	10.7
	Flying	4	14.2
	Geography	-	-
	Nuclear Research	-	-
	Literature	-	-
14	<u>I believe that TV is most useful in:</u>		
	Military training	4	14.2
	College courses	2	7.1
	Adult education	6	21.4
	High school	5	17.8
	Grade school	8	28.5
15	<u>In which is TV more useful:</u>		
	Tech school	11	39.2
	High school	12	42.8

-continued-

TABLE 8 -- Continued

Quest. No.	Question and Response Option	N	%
	Basic training	13	46.4
	Tech school	6	21.4
	College	6	21.4
	Adult education	17	60.7
	High school	14	50.0
	College	9	32.1
16	<u>I want more technology in my life:</u>		
	Agree	20	71.4
	Disagree	8	28.5
17	<u>I would learn more from a TV course if I had a studio tour before the class began:</u>		
	Agree	9	32.1
	Disagree	19	67.8
18	<u>Would you be inspired to do more research if the teaching you received was:</u>		
	Direct	19	67.8
	TV	9	32.1
19	<u>The quality of instruction I receive now is better via:</u>		
	Direct	23	82.9
	TV	2	7.1

-continued-

TABLE 8 -- Continued

Quest. No.	Question and Response Option	N	%
20	<u>Why do you feel that Direct instruction is better than TV instruction?</u>		
	I get to ask questions	15	53.5
	I'm more inspired	2	7.1
	TV is too incomplete	1	3.5
21	<u>If you could hear a live lecture, no demonstrations, audience of 100 in a satisfactory, modern room, or watch the same lecture at the same time on TV in a similar room, which would you choose?</u>		
	TV	6	21.4
	Live	22	78.5
22	<u>Why did you answer "TV" in question 21?</u>		
	More peaceful than the live lecture..	6	21.4
	Less crowded	2	7.1
	TV is just as efficient as live	5	17.8
	My friends went to the TV room	-	0.0
	I can do something else while the TV operates	-	0.0
23	<u>If a proctor were in the Tv room, I'd:</u>		
	Go watch the live lecture	1	3.5
	Stay in the TV room	1	3.5
24	<u>I'd listen to the live lecture because:</u>		
	It makes me feel human	4	14.2
	My friends would be there	1	3.5
	I get more from Direct than from TV..	16	57.1
	Less crowded	1	3.5
	In a crowd I can sleep	-	0.0
25	<u>Direct teaching is generally:</u>		
	Entertaining	23	82.1
	Dull	5	17.8
	Communicative	25	89.2
	Hard to follow	2	7.1

-continued-

TABLE 8 -- Continued

Quest. No.	Question and Response Option	N	%
	Friendly	23	82.1
	Remote	4	14.2
	Fun	23	82.1
	Boring	4	14.2
26	<u>In a direct class, how many times do you ask questions?</u>		
	At least once a class	17	60.7
	Once every other class	8	28.5
	Once every third class	1	3.5
	Less	2	7.1
27	<u>I'd learn more from:</u>		
	Blackboard TV lecture	2	7.1
	Blackboard direct lecture	19	67.8
	Direct lecture	6	21.4
	TV lecture	1	3.5
28	<u>Would you like to have part of your education by TV?</u>		
	Yes	15	53.5
	No	13	46.4
29	<u>If you answered "Yes" to question 28, what part of your overall education program would you like to see given via TV?</u>		
	Less than 10%	7	25.0
	10-40%	13	46.4
	40-60%	1	3.5
	60-80%	-	0.0
	80-100%	1	3.5

-continued-

TABLE 8 -- Continued

Quest. No.	Question and Response Option	N	%
30	<u>Select each item you feel is a drawback to TV tapes:</u>		
	Dull	7	25.0
	Too fast	2	7.1
	Jargon	1	3.5
	Biased	6	21.4
	Religious attitude forced on audience.	-	0.0
	Manipulative	4	14.2
	Vague	3	10.7
	Confusing	1	3.5
	None of above	11	39.2
31	<u>Would you be interested in a course taught all by TV?</u>		
	Yes	6	21.4
	No	11	39.2
32	<u>I feel that TV effectiveness is reduced by the number of feet you are from the TV screen:</u>		
	Yes	13	46.4
	No	11	39.2
33	<u>If I could ask questions after a TV tape were shown, or I could leave, I'd:</u>		
	Leave	3	10.7
	Sit and listen to others' questions..	7	25.0
	Ask a question	15	53.5
34	<u>TV instruction is:</u>		
	Dull	19	67.8
	Lively	7	25.0
	Efficient	14	50.0
	Wasteful	12	42.8
	Fun	6	21.4
	Boring	20	71.4

-continued-

TABLE 8 -- Continued

Quest. No.	Question and Response Option	N	%
35	<u>Would you enjoy TV classes more if you knew that the teaching method had no grade impact?</u>		
	Yes	10	35.7
	No	18	64.2
36	<u>I'd rather not be exposed to any educational TV in my school environment:</u>		
	Agree	10	35.7
	Disagree	18	64.2
37	<u>I'd like to have CCTV available in my dormitory:</u>		
	Agree	16	57.1
	Disagree	11	39.2
38	<u>I'd like more tapes available at the nearest library:</u>		
	Agree	17	60.7
	Disagree	11	39.2
39	<u>When I eat in a military mess, I'd like to watch military films via TV:</u>		
	Agree	3	10.7
	Disagree	22	78.5
40	<u>I'd like access to all-night news shows via TV:</u>		
	Agree	15	53.5
	Disagree	12	42.8
41	<u>More basic training lectures should be given via TV:</u>		
	Agree	7	25.0
	Disagree	20	71.4

-continued-

TABLE 8 -- Continued

Quest. No.	Question and Response Option	N	%
42	<u>More of my tech school courses could be taught via TV:</u>		
	Agree	10	35.7
	Disagree	18	64.2
43	<u>More ROTC lectures could be on TV tape:</u>		
	Agree	14	50.0
	Disagree	14	50.0
44	<u>I like TV in the classroom:</u>		
	Agree	13	46.4
	Disagree	14	50.0
45	<u>I want more TV in the classroom:</u>		
	Agree	10	35.7
	Disagree	15	53.3
46	<u>Teachers' skill being equal, in which type of class do you learn more?</u>		
	Lecture	17	60.7
	Media	6	21.4
	Seminar	5	17.8
47	<u>If the teacher were unskilled, in which type of class would you learn the most?</u>		
	Lecture	5	17.8
	Media	18	64.2
	Seminar	5	17.8
48	<u>If the teacher were outstanding, in which type of class would you learn the most?</u>		
	Lecture	16	57.1
	Media	5	17.8
	Seminar	7	25.0

-continued-

TABLE 8 -- Continued

Quest. No.	Question and Response Option	N	%
49	<u>How do you rate your military teachers overall compared to civilian teachers?</u>		
	Far better	7	25.0
	Somewhat better	10	35.7
	The same as civilian	10	35.7
	Somewhat worse	1	3.5
	Much worse	-	0.0
50	<u>If you had all your instruction via TV, would you learn as much as if you had traditional direct instruction?</u>		
	Yes	3	10.7
	No	12	42.8
	Don't know	13	46.4
51	<u>If all of your classes were presented via TV, do you feel the tapes could be good enough that you would rarely (less than once/two weeks) need to see a teacher face-to-face?</u>		
	Yes	7	25.0
	No	21	75.0
52	<u>Which is more honest, TV or a live teacher?</u>		
	No difference	11	39.2
	TV	3	10.7
	Teacher	14	50.0
53	<u>I would enjoy a course of my choice taught all by TV even if I never saw an instructor:</u>		
	Agree	7	25.0
	Disagree	21	75.0

-continued-

TABLE 10
SUMMARY OF UNIT VARIANCES FOR TV

(results expressed in %)

Quest. No.	Question and Response Option	SOS	LOWRY	ROTC	AFIT	AIS
2	<u>What is your favorite type of class?</u>					
	Media	4.1	19.2	10.7	7.1	5.3
	Lecture	12.5	14.1	33.0	89.2	13.8
	Seminar	30.2	15.6	11.6	00.0	23.4
5	<u>If I knew that it made no difference in my grade, I'd take a course via:</u>					
	TV.....	13.5	20.3	14.2	12.5	12.7
	Direct	30.2	17.7	33.9	39.2	26.5
	Mix	53.1	49.1	49.1	41.0	56.3
9	<u>The quality of videotapes is:</u>					
	Good	31.2	27.5	22.3	16.0	22.3
	Poor	20.5	13.9	20.5	32.1	21.2
10	<u>TV is best suited for:</u>					
	Demonstration	17.7	49.5	10.7	12.5	38.2
	Lecture	50.0	12.7	38.3	64.2	38.2
	No difference	26.0	30.9	25.8	14.2	36.1
12	<u>I like TV best in the classroom when used:</u>					
	Daily	21.8	25.6	13.3	10.7	12.7
	Three times a week	42.7	39.1	16.9	14.2	43.6
	Once a week	28.1	28.1	32.9	58.9	30.8

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CHAPTER 7

SUMMARY OF UNIT VARIANCES

This chapter presents a contrast between the expressed attitudes of the students all of the units involved in this project. All responses are presented by percentage only. Table 10 presents a contrast for all questions for which significant differences were identified. Table 11 identifies the courses which students wish to have taught all by TV. Table 12 identifies the high/low responses by unit for the questions listed in Table 10. Table 13 lists the high/low responses for Table 11.

TABLE 9 -- Continued

Quest. No.	Question and Response Option	N	%
57	<u>I like the fact that an instructor won't call on me in a TV class:</u>		
	Agree	25	25.0
	Disagree	57	56.2
58	<u>Educational TV will reduce the number of faculty needed:</u>		
	Agree	38	37.5
	Disagree	21	20.5
	Don't know	25	25.0
N = 101			
Average age: 21			

TABLE 9 -- Continued

Quest. No.	Question and Response Option	N	%
51	<u>If all of your classes were presented via TV, do you feel the tapes could be good enough that you would rarely (less than once/two weeks) need to see a teacher face-to-face?</u>		
	Yes	25	25.0
	No	70	69.6
52	<u>Which is more honest, TV or a live teacher?</u>		
	No difference	44	43.7
	TV	9	8.9
	Teacher	46	45.5
53	<u>I would enjoy a course of my choice taught all by TV even if I never saw an instructor:</u>		
	Agree	35	34.8
	Disagree	61	60.7
54	<u>I would enjoy a course of my choice taught by TV if I could see a teacher when I wanted to, but didn't have to:</u>		
	Agree	67	66.0
	Disagree	31	30.3
55	<u>I would take a course of my choice by TV if I could ask questions on the spot:</u>		
	Agree	81	80.3
	Disagree	17	16.9
56	<u>A course that a teacher needs 50 min. to teach could be done in 35 min. via TV</u>		
	Agree	13	13.3
	Disagree	36	35.7
	Perhaps	50	49.1

-continued-

TABLE 9 -- Continued

Quest. No.	Question and Response Option	N	%
45	<u>I want more TV in the classroom:</u>		
	Agree	34	33.9
	Disagree	46	45.5
46	<u>Teachers' skill being equal, in which type of class do you learn more?</u>		
	Lecture	53	52.6
	Media	18	17.8
	Seminar	28	27.6
47	<u>If the teacher were unskilled, in which type of class would you learn the most?</u>		
	Lecture	12	11.6
	Media	62	61.6
	Seminar	23	23.2
48	<u>If the teacher were outstanding, in which type of class would you learn the most?</u>		
	Lecture	71	70.5
	Media	10	9.8
	Seminar	18	17.8
49	<u>How do you rate your military teachers overall compared to civilian teachers?</u>		
	Far better	11	10.7
	Somewhat better	33	33.0
	The same as civilian	46	45.5
	Somewhat worse	-	00.0
	Much worse	-	00.0
50	<u>If you had all of your instruction via TV, would you learn as much as if you had traditional direct instruction?</u>		
	Yes	9	8.9
	No	52	51.7
	Don't know	36	35.7

-continued-

TABLE 9 -- Continued

Quest. No.	Question and Response Option	N	%
37	<u>I'd like to have CCTV available in my dormitory:</u>		
	Agree	59	58.9
	Disagree	32	32.1
38	<u>I'd like more TV tapes available at the nearest library:</u>		
	Agree	59	58.0
	Disagree	32	32.1
39	<u>When I eat in a military mess, I'd like to watch military films via TV:</u>		
	Agree	18	17.8
	Disagree	32	32.1
40	<u>I'd like access to all-night news shows via TV:</u>		
	Agree	53	52.6
	Disagree	60	59.8
41	<u>More basic training lectures should be given via TV:</u>		
	Agree	26	25.8
	Disagree	60	59.9
42	<u>More of my tech school courses could be taught via TV, either CCTV or tapes:</u>		
	Agree	34	33.9
	Disagree	51	50.0
43	<u>More ROTC lectures could be on TV tape:</u>		
	Agree	45	44.6
	Disagree	43	43.7
44	<u>I like TV in the classroom:</u>		
	Agree	41	40.1
	Disagree	43	42.8

-continued-

TABLE 9 -- Continued

Quest. No.	Question and Response Option	N	%
31	<u>Would you be interested in a course taught all by TV?</u>		
	Yes	19	18.7
	No	76	75.0
32	<u>I feel that TV effectiveness is reduced by the number of feet you are from the screen.</u>		
	Yes	59	58.0
	No	33	33.0
33	<u>If I could ask questions after a TV tape were shown, or I could leave, I'd:</u>		
	Leave	12	11.6
	Sit and listen to others' questions .	38	37.5
	Ask a question	43	42.8
34	<u>TV instruction is:</u>		
	Dull	65	64.2
	Lively	28	27.6
	Efficient	56	55.3
	Wasteful	34	33.9
	Fun	28	27.6
	Boring	63	62.5
35	<u>Would you enjoy TV classes more if you knew that the teaching method had no grade impact?</u>		
	Yes	43	42.8
	No	53	52.6
36	<u>I'd rather not be exposed to any educational TV in my school environment:</u>		
	Agree	32	32.1
	Disagree	60	59.8

-continued-

TABLE 9 -- Continued

Quest. No.	Question and response Option	N	%
26	<u>In a direct class, how many times do you ask questions?</u>		
	At least once a class	41	41.0
	Once every other class	26	25.8
	Once every third class	17	16.9
	Less	14	14.2
27	<u>I'd learn more from:</u>		
	Blackboard TV lecture	7	7.1
	Blackboard direct lecture	68	66.9
	Direct lecture	15	15.1
	TV lecture	6	6.2
28	<u>Would you like to have part of your education by TV?</u>		
	Yes	47	46.4
	No	49	48.2
29	<u>If you answered "Yes" to Question 28, what part of your overall educational program would you like to see given via TV?</u>		
	Less than 10%	16	16.0
	10 - 40%	46	45.5
	40 - 60%	4	4.4
	60 - 80%	-	0.0
	80 - 100%	2	1.7
30	<u>Select each item you feel is a drawback to TV tapes:</u>		
	Dull	25	25.0
	Too fast	3	2.6
	Jargon	13	13.3
	Biased	4	4.4
	Religious attitude forced on audience.	2	2.6
	Manipulative	13	13.3
	Vague	17	16.9
	None of above	37	36.6

-continued-

TABLE 9 -- Continued

Quest. No.	Question and Response Option	N	%
22	<u>Why did you answer "TV" in question 21?</u>		
	More peaceful than live lecture	20	19.6
	Less crowded	11	10.7
	TV is just as efficient as live	13	13.3
	My friends went to the TV room	-	00.0
	I can do something else while the TV operates	2	1.7
23	<u>If a proctor were in the TV room, I'd:</u>		
	Go watch the live lecture	6	6.2
	Stay in the TV room	7	7.1
24	<u>I'd listen to the live lecture because:</u>		
	It makes me feel human	17	16.9
	My friends would be there	4	4.4
	I get more from direct than from TV .	51	50.8
	Less crowded	3	2.6
	In a crowd I can sleep	2	1.7
25	<u>Direct teaching is generally:</u>		
	Entertaining	71	70.5
	Dull	25	25.0
	Communicative	85	83.9
	Hard to follow	12	11.6
	Friendly	83	82.1
	Remote	13	13.3
	Fun	79	78.5
	Boring	14	14.2

-continued-

TABLE 9 -- Continued

Quest. No.	Question and Response Option	N	%
16	<u>I want more technology in my life:</u>		
	Agree	15	15.1
	Disagree	78	77.6
17	<u>I would learn more from a TV course if I has a studio tour before the class began:</u>		
	Agree	26	25.8
	Disagree	60	59.8
18	<u>Would you be inspired to do more research if the teaching you received was:</u>		
	Direct	78	77.6
	TV	21	20.5
19	<u>The quality of instruction I receive now is better via:</u>		
	Direct	86	85.7
	TV	9	8.9
20	<u>Why do you feel that Direct instruction is better than TV instruction?</u>		
	I get to ask questions	37	36.6
	I'm more inspired	4	4.4
	TV is too incomplete	2	1.7
21	<u>If you could hear a live lecture, no demonstrations, audience of 100 in a satisfactory, modern room, or watch the same lecture at the same time on TV in a similar room, which would you choose:</u>		
	TV	23	23.2
	Live	75	74.1

-continued-

TABLE 9 -- Continued

Quest. No.	Question and Response Option	N	%
13	<u>Students indicated that they would enroll in these courses taught all by TV:</u>		
	History	36	35.7
	Psychology	21	20.5
	Military Tactics	20	19.6
	Military Courtesy	28	27.6
	Basic Military Information	30	29.4
	Geography	20	19.6
14	<u>I believe that TV is most useful in:</u>		
	Military training	17	16.9
	College courses	14	14.2
	Adult education	26	25.8
	High school	13	13.3
	Grade school	20	19.6
15	<u>In which is TV more useful:</u>		
	Tech school	42	41.9
	High school	33	33.0
	Basic training	45	44.6
	Tech school	32	31.3
	College	28	27.6
	Adult education	47	46.4
	High school	44	43.7
	College	31	30.3

-continued-

TABLE 9 -- Continued

Quest. No.	Question and Response Options	N	%
6	<u>I'd receive a better grade from a course that was:</u>		
	TV	5	5.3
	Direct	54	53.5
	Mix	40	39.2
7	<u>I'd learn more from a course that was:</u>		
	TV	3	2.6
	Direct	58	57.1
	Mix	39	38.3
8	<u>I'd rather watch TV instruction via:</u>		
	Color	73	72.3
	Black and White	3	2.6
9	<u>The quality of videotapes I view is:</u>		
	Good	22	22.3
	Poor	21	20.5
	Average	37	36.6
10	<u>TV is best suited for:</u>		
	Demonstration	11	10.7
	Lecture	39	38.3
	No difference	26	25.8
11	<u>If TV were used in my classroom, I'd prefer it to be used:</u>		
	The entire period	4	4.4
	1/2 the period	38	37.5
	10 minutes per period	18	17.8
	Not at all	17	16.9
12	<u>I like TV in the classroom best when used:</u>		
	Daily	13	13.3
	Three times per week	17	16.9
	Once a week	40	39.2

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TABLE 9
ALL ROTC
TV ATTITUDE DATA SUMMARY

Quest. No.	Question and Response Options	N	%
1	<u>I am a:</u>		
	Senior	29	28.5
	Junior	26	25.8
	Sophomore	24	24.1
	Freshman	17	16.9
2	<u>What is your favorite type of class?</u>		
	Lecture	33	33.0
	Media	11	10.7
	Seminar	12	11.6
	Combination to include "b".	32	31.2
	Combination without "b".	12	11.6
3	<u>TV an an instructional tool is best suited for:</u>		
	Grade school	23	22.3
	Junior/High school	16	16.0
	College/Tech school	27	26.7
	Adult education programs	29	28.5
4	<u>A TV course is best suited for which sized audience?</u>		
	Small (less than 30)	30	29.4
	Medium (30-100)	11	10.7
	Large (100+)	11	16.0
	Never suited for classroom use	39	38.3
5	<u>If I knew that it would make no difference in my grade, I'd take a course taught via:</u>		
	TV	14	14.2
	Direct	34	33.9
	Mix	50	49.1

-continued-

TABLE 8 -- Continued

Quest. No.	Question and Response Option	N	%
62	<u>I would enjoy a course of my choice taught by TV if I could see a teacher when I wanted to, but didn't have to:</u>		
	Agree	18	64.2
	Disagree	9	32.1
63	<u>I would take a course of my choice by TV if I could ask questions on the spot:</u>		
	Agree	23	82.1
	Disagree.	4	14.2
64	<u>A course that a teacher needs 50 min. to teach could be done in 35 min. by TV.</u>		
	Agree	3	10.7
	Disagree	9	32.1
	Perhaps	16	57.1
65	<u>I like the fact that an instructor won't call on me in a TV class:</u>		
	Agree	8	28.5
	Disagree	18	66.8
66	<u>Educational TV will reduce the number of faculty needed:</u>		
	Agree	14	50.0
	Disagree	4	14.2
	Don't know	9	32.1
N = 28			
Average age: 21			

TABLE 10 -- Continued

Quest. No.	Question and Response Option	SOS	LOWRY	ROTC	AFIT	AIS
17	<u>I'd learn more from an ITV course if I had a studio tour before the class began:</u>					
	Yes	13.5	37.5	25.8	17.8	38.2
	No	84.3	57.4	59.8	71.4	55.4
18	<u>Would you be more inspired to do research if the teaching you received was:</u>					
	via TV	12.5	27.9	20.5	8.9	14.8
19	<u>The quality of instruction I receive now is better via:</u>					
	TV	9.3	15.4	8.9	7.1	2.2
21	<u>If you could hear a live lecture, with no demonstration audience of 100 in a satisfactory modern room, or watch the same lecture at the time in a similar room, which would you choose?</u>					
	TV	18.7	32.6	23.2	21.4	21.1
	Live	80.2	65.6	74.1	73.2	76.5
22	<u>Why did you answer "TV?"</u>					
	Peaceful	6.2	19.9	19.9	5.3	5.3
	Less crowded	9.2	6.5	10.7	7.1	4.2
	TV is equally efficient ...	11.4	21.1	13.3	12.5	18.0
	My friends went to the TV room	00.0	1.4	00.0	00.0	00.0
	I can do something else while the TV runs	2.0	2.1	1.7	00.0	4.2

-continued-

TABLE 10 -- Continued

Quest. No.	Question and Response Option	SOS	LOWRY	ROTC	AFIT	AIS
25	<u>Direct teaching is generally:</u>					
	Dull	15.6	34.7	25.0	28.5	12.7
	Hard to follow	3.1	13.3	11.6	16.0	3.1
	Boring	14.5	30.0	14.2	17.8	6.3
27	<u>I'd learn more from:</u>					
	Blackboard lecture via TV..	9.3	16.9	7.1	7.1	6.3
28	<u>Would you like to have part of your education via TV?</u>					
	Yes	43.7	66.3	46.4	33.9	70.2
	No	28.1	31.1	48.2	62.5	18.0
31	<u>Would you be interested in a course all by TV?</u>					
	Yes	22.9	26.9	18.7	16.0	34.0
	No	28.1	31.1	48.2	62.5	18.0
32	<u>I feel TV effectiveness is reduced by the number of feet you are from the screen:</u>					
	No	23.9	57.4	33.0	28.5	30.8
33	<u>If I could ask questions after a TV tape was shown, or I could leave, I'd:</u>					
	Leave	21.8	4.6	11.6	32.1	10.6
	Listen to others' questions	38.5	36.2	37.5	25.0	18.0
	Ask a question	36.4	50.0	42.8	33.9	41.4

-continued-

TABLE 10 -- Continued

Quest. No.	Question and Response Option	SOS	LOWRY	ROTC	AFIT	AIS
34	<u>TV instruction is:</u>					
	Dull	71.8	54.8	64.2	67.8	55.3
	Lively	26.0	41.1	27.6	17.8	26.5
	Fun	34.3	42.7	27.6	26.7	23.4
39	<u>When I eat in a military mess, I'd like to watch military films on TV:</u>					
	Yes	14.5	27.9	17.8	7.1	9.5
	No	84.3	68.2	67.8	82.1	80.8
42	<u>More of my tech school courses could be taught by TV:</u>					
	Yes	31.2	41.9	33.9	25.0	43.6
	No	64.5	50.8	50.0	64.2	47.8
45	<u>I want more TV in the classroom:</u>					
	Yes	29.1	45.5	33.9	21.4	28.7
	No	68.7	47.2	45.5	69.6	61.7
46	<u>Teachers' skill being equal, in which type of class do you learn more?</u>					
	Media	8.3	33.2	17.8	5.3	10.6
48	<u>If the teacher were outstanding, in which type of class would you learn the most?</u>					
	Media	5.2	14.6	9.8	7.1	6.3

-continued-

TABLE 10 -- Continued

Quest. No.	Question and Response Option	SOS	LOWRY	ROTC	AFIT	AIS
49	<u>How do you rate your military teachers overall as compared to civilian teachers?</u>					
	Far better	11.4	19.4	10.7	3.5	15.9
	Somewhat better	29.1	34.9	33.0	7.1	34.0
	The same as civilian	36.4	33.4	45.5	58.9	38.2
	Somewhat worse	19.7	7.6	00.0	17.8	8.5
	Much worse	00.0	.8	00.0	8.9	00.0
50	<u>If you had all your instruction via TV, would you learn as much as if you had traditional direct instruction?</u>					
	Yes	6.2	12.9	8.9	3.5	2.1
	No	79.1	41.9	51.7	71.4	67.0
	Don't know	11.4	42.7	35.7	19.6	26.5
51	<u>If all your classes were presented via TV, do you feel the tapes could be good enough that you would rarely (less than once/two weeks) need to see a teacher face-to-face?</u>					
	Yes	16.6	29.8	25.0	26.7	10.6
	No	80.2	67.5	69.6	67.8	82.9
54	<u>I would enjoy a course of my choice if I could see a teacher if I wanted to, but didn't have to:</u>					
	Yes	75.0	41.3	66.0	66.0	70.2
	No	25.0	57.8	30.3	53.5	27.6

-continued-

TABLE 10 -- Continued

Quest. No.	Question and Response Option	SOS	LOWRY	ROTC	AFIT	AIS
57	<u>I like the fact that an instructor won't call on me in class:</u>					
	Yes	27.0	34.1	25.0	26.7	21.2
58	<u>Educational TV will reduce the number of faculty needed:</u>					
	Agree	37.5	40.4	37.5	32.1	35.1
	Disagree	31.2	14.1	20.5	26.7	19.1
	Don't know	30.2	41.3	25.0	35.7	41.4

TABLE 11
COURSES STUDENTS DESIRED TO HAVE TAUGHT BY TV

Quest. No.	Question and Response Option	SOS	LOWRY	ROTC	AFIT	AIS
13	<u>Which of the following courses would you like to taught all by TV?</u>					
	History	51.0	44.0	35.7	35.7	39.3
	Geography	32.2	26.6	19.6	26.7	-
	Military Courtesy	13.5	26.6	27.6	32.1	32.9
	Psychology	19.7	11.2	20.5	10.7	15.9
	Military Tactics	11.4	11.6	19.6	-	-
	Basic Military Information.	40.6	29.0	29.4	25.0	35.1
	Vehicle Maintenance	13.5	23.3	-	10.7	19.1
	English	19.7	18.0	-	10.7	19.1
	Math	11.4	18.6	-	35.7	-

(Note: cutoff is 10.0)

TABLE 12
HIGH/LOW RESPONSES FOR TABLE 10

Quest. No.	Question and Response Option	SOS	LOWRY	ROTC	AFIT	AIS
2	<u>What is your favorite type of class?</u>					
	Media	4.1	19.2			
	Lecture	12.5			89.2	
	Seminar	30.2			00.0	
5	<u>If I knew that it made no difference in my grade, I'd take a course via:</u>					
	TV.....		20.3		12.5	
	Direct		17.7		39.2	
	Mix	53.1			41.0	
9	<u>The quality of videotapes is:</u>					
	Good	31.2			16.0	
	Poor		13.9		32.1	
10	<u>TV is best suited for:</u>					
	Demonstration		49.5	10.7		
	Lecture		12.7		64.2	
	No difference				14.2	36.1
12	<u>I like TV best in the classroom when used:</u>					
	Daily		25.6		10.7	
	Three times a week				14.2	43.6
	Once a week	28.1	28.1		58.9	

-continued-

TABLE 12 -- Continued

Quest. No.	Question and Response Option	SOS	LOWRY	ROTC	AFIT	AIS
17	<u>I'd learn more from an ITV course if I had a studio tour before the class began:</u>					
	Yes	13.5	37.5			
	No	84.3				55.4
18	<u>Would you be more inspired to do research if the teaching you received was:</u>					
	via TV		27.9		8.9	
19	<u>The quality of instruction I receive now is better via:</u>					
	TV		15.4			2.2
21	<u>If you could hear a live lecture, with no demonstration audience of 100 in a satisfactory modern room, or watch the same lecture at the time in a similar room, which would you choose?</u>					
	TV	18.7	32.6			
	Live	80.2	65.6			
22	<u>Why did you answer "TV?"</u>					
	Peaceful		19.9	19.9	5.3	5.3
	Less crowded			10.7		4.2
	TV is equally efficient ...	11.4	21.1			
	My friends went to the TV room	00.0	1.4	00.0	00.0	00.0
	I can do something else while the TV runs				00.0	4.2

-continued-

TABLE 12 -- Continued

Quest. No.	Question and Response Option	SOS	LOWRY	ROTC	AFIT	AIS
25	<u>Direct teaching is generally:</u>					
	Dull		34.7			12.7
	Hard to follow	3.1			16.0	3.1
	Boring		30.0			6.3
27	<u>I'd learn more from:</u>					
	Blackboard lecture via TV..		16.9			6.3
28	<u>Would you like to have part of your education via TV?</u>					
	Yes				33.9	70.2
	No				62.5	18.0
31	<u>Would you be interested in a course all by TV?</u>					
	Yes				16.0	34.0
	No				62.5	18.0
32	<u>I feel TV effectiveness is reduced by the number of feet you are from the screen:</u>					
	No	23.9	57.4			
33	<u>If I could ask questions after a TV tape was shown, or I could leave, I'd:</u>					
	Leave		4.6		32.1	
	Listen to others' questions	38.5				18.0
	Ask a question		50.0		33.9	

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TABLE 12 -- Continued

Quest. No.	Question and Response Option	SOS	LOWRY	ROTC	AFIT	AIS
34	<u>TV instruction is:</u>					
	Dull	71.8	54.8			
	Lively		41.1		17.8	
	Fun		42.7			23.4
39	<u>When I eat in a military mess, I'd like to watch military films on TV:</u>					
	Yes		27.9		7.1	
	No	84.3		67.8		
42	<u>More of my tech school courses could be taught by TV:</u>					
	Yes				25.0	43.6
	No	64.5				47.8
45	<u>I want more TV in the classroom:</u>					
	Yes		45.5		21.4	
	No			45.5	69.6	
46	<u>Teachers' skill being equal, in which type of class do you learn more?</u>					
	Media		33.2		5.3	
48	<u>If the teacher were outstanding, in which type of class would you learn the most?</u>					
	Media	5.2	14.6			

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TABLE 12 -- Continued

Quest. No.	Question and Response Option	SOS	LOWRY	ROTC	AFIT	AIS
49	<u>How do you rate your military teachers overall as compared to civilian teachers?</u>					
	Far better		19.4		3.5	
	Somewhat better		34.9		7.1	
	The same as civilian		33.4		58.9	
	Somewhat worse	19.7		00.0		
	Much worse	0.0		00.0	8.9	00.0
50	<u>If you had all your instruction via TV, would you learn as much as if you had traditional direct instruction?</u>					
	Yes		12.9			2.1
	No	79.1	41.9			
	Don't know	11.4	42.7			
51	<u>If all your classes were presented via TV, do you feel the tapes could be good enough that you would rarely (less than once/two weeks) need to see a teacher face-to-face?</u>					
	Yes		29.8			10.6
	No	80.2	67.5			
54	<u>I would enjoy a course of my choice if I could see a teacher if I wanted to, but didn't have to:</u>					
	Yes	75.0	41.3			
	No	25.0	57.8			
57	<u>I like the fact that an instructor won't call on me in class:</u>					
	Yes		34.1			21.2

-continued-

TABLE 12 -- Continued

Quest. No.	Question and Response Option	SOS	LOWRY	ROTC	AFIT	AIS
58	<u>Educational TV will reduce the number of faculty needed:</u>					
	Agree		40.4		32.1	
	Disagree	31.2	14.1			
	Don't know			25.0		41.4

TABLE 13
HIGH/LOW RESPONSES FOR TABLE 11

Quest. No.	Question and Response Option	SOS	LOWRY	ROTC	AFIT	AIS
13	<u>Which of the following courses would you like to taught all by TV?</u>					
	History	51.0		35.7	35.7	
	Geography	32.2		19.6		
	Military Courtesy	13.5				32.9
	Psychology			20.5	10.7	
	Military Tactics	11.4		19.6		
	Basic Military Information.	40.6			25.0	
	Vehicle Maintenance		23.3		10.7	
	English	19.7			10.7	
	Math	11.4			35.7	

(Note: cutoff is 10.0)

CHAPTER 8

CONCLUSIONS AND RECOMMENDATIONS

This chapter presents research conclusions from this study about military student attitudes towards ITV. Recommendations derived from the research conclusions are being presented to deans of military higher education institutions concerning the appropriate application of ITV within the military school system.

Relationship of Education Level to Attitudes

The findings of this study concerning the effect of increased exposure to ITV as illustrated by differing educational levels agreed with the literature review. The conclusion was that the more educated the student, the less favorable the student's attitude was towards TV use in the classroom. This was suggested by a comparison of the attitudes

expressed by students at Lowry AFB and the AFIT students. This suggested that the student definition of the nature of quality education changed as the students were exposed to quality teaching and as their expectations of "quality education" changed. The attitudes of the faculty probably influenced the students' attitudes, especially when one considers the unique influence of the military teacher as role model.

Mr. Jim Rodgers of USAFA-TV suggested that students do not favor TV in the classroom because it restricts the students' ability to influence the course of events during the class period. This limitation is perceived more as the overall education of the students increases their awareness of teaching methodologies and the students' role in the application of those methodologies. This suggestion deserves further research to establish it as a cause for students' dislike of ITV.

The recommendations derived from the examination of differences in student attitudes by educational level are as follows. Findings for the effect of differing educational levels on attitude suggest that more consideration should be given to selecting the audience most receptive to ITV use when determining which audience will receive instruction via ITV. It is suggested that serious consideration should be given to limiting TV classroom application to specific groups of military students. Results of this study suggest that within the military school system, TV use be targeted to the younger and less educated students. Results of this study suggest that TV may be inappropriate for all courses except ATC technical courses.

Importance of the Student-Teacher Relationship

As the literature review suggested, the results suggested that the military students believed that the student-teacher relationship was very important. The literature review suggested that the loss of student-teacher interaction was the primary reason for both teacher and student dislike of TV.

It may be suggested that the importance of the student-teacher relationship was greater for the military student than it was for his civilian counterpart. This could possibly be caused by the restricted life that many military students lead, caused by restrictions on leaving the base, owning a car, visiting family, marrying, and finding civilian adult friends. The student-teacher relationship was one of the few available opportunities for the military students to exchange ideas in an informal situation with adults.

It was noted that the opportunity to ask questions was the primary reason why the students did not favor ITV use. Literature suggests that even if the students do not ask a question, they object to the loss of the chance. Research also shows that asking questions is rarely related to the students' learning anything. Rather, asking questions establishes the students' dependence upon the teacher, provides a chance for the student to be noticed, and establishes the teacher as an authority. However, this variable still is the central barrier to increased TV use.

The recommendation is therefore made that military teachers should be hired based upon their ability to perform in the classroom and to interact with the students, rather than based upon their own

academic achievements. In light of the suggestion that the more educated the student the more important the student-teacher interaction, the concept of hiring skilled classroom teachers becomes even more important at schools such as AFIT, where student were strongly opposed to ITV use.

Need for Teacher Training

The implications cited about audience may have significant impact on curriculum planning for all military schools. Teachers at the military units surveyed were receiving little orientation in the matter of the philosophy of ITV application. Thus, this study revealed the need for teachers to receive training in the philosophy of ITV application in the classroom. This was especially essential at military schools which are using a significant amount of ITV instruction. In discussing the use of ITV with military teachers, it was clear that they had attitudes regarding ITV use, but had no knowledge about TV literature or data to support their opinions. In fact, military teachers who had not had any education courses had little idea of exactly why they used any given methodology in the classroom environment. On the other hand, there were people encountered within the military environment who did know exactly how TV could be best applied. At Lowry AFB, these professionals existed within the Army television planning unit. At the Air Force Institute of Technology, they were staffing the television classroom. Therefore, this research revealed that within the military structure, teachers taught without being able

to justify which teaching methodology was selected for classroom use. But, production professionals knew why, how, and when to use TV to the best advantage. There was little evidence, except of the most informal variety, of any crossfeed between the military TV professionals and new teachers. Consideration should be given to developing a short orientation course to be presented to new teachers who have not taught before which would present the philosophy of ITV use, as well as present the military student attitudes towards ITV based on the data collected for this report. This course is especially essential for teachers with a teaching background sufficient to waive their attending the Academic Instructor School. Attitudes can not be changed in favor of technology if one of the main determinants of attitudes, the teachers, do not understand why they select a given classroom methodology.

Application of ITV in Other Areas of the Educational Environment

In informal interviews with faculty members, it was clear that teachers regarded TV as restricted to academic use. Educators need to examine the proposition that TV can be used in the military educational system for more than, or in place of, classroom instruction. As Donald G. Tarbet noted, TV can be used for student orientation to orient students to "regulations/procedures and the campus layout. Social and athletic announcements could be made via TV as well."¹ This could be especially useful at SOS, AFIT, and within Air Training Command. Tarbet also noted that student registration could be smoothed by using TV to inform students about closed classes and course offerings.²

¹ Donald G. Tarbet, Television and Our Schools (New York: Ronald Press, 1961), p. 141.

² Ibid.

The respondents favored implementation of TV in their living quarters. They could view tapes of news shows which were presented at times when the students were in class. This is especially useful at ATC bases where the students may miss the morning or evening news broadcasts due to class attendance. The military students also favored additional TV viewing carrels be added to their servicing library.

Single Source Manager

Although use of the "single source" TV manager (one individual who advises all teachers within that organization about the application of ITV) may restrict the freedom of faculty choice, some implementation of this concept may result in a more unified direction to TV use, rather than leaving the decision of extensive course TV taping primarily to the course directors and teachers. This action is required since new military teachers do not have the academic background to make policy decisions about ITV. The single source manager could also train the new teachers in TV curriculum at an institution. This individual should have both an education and a TV production background. It is recommended that each military school hire such an individual as soon as possible.

Continued Research

It is recommended that an educator be appointed to continue with TV research. Far too much is still unknown in the areas of the impact of TV tape quality on attitude, faculty attitudes towards TV, the impact of production personnel attitudes on cadet attitudes, and

the effect of teaching methodology on student retention. The greatest problem to overcome will be finding qualified military people with the academic background in both education and TV to conduct research.

Report Distribution

This report should be distributed to military instructors, as well as to deans. It is recommended that distribution be made to military libraries at all units and headquarters involved in this project. It is the duty of military educators to apply this data to their unique situation. Sufficient material has been included to allow military teachers and administrators to make intelligent decisions so that the educational systems within the military environment may be improved. Improvement of student attitudes lies within the realms of television production and the classroom instructor, and that improvement can only be attained through research and the resulting knowledge.

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